

# 46th ANNUAL REPORT

FOR THE FISCAL YEAR JULY 1, 1975, TO JUNE 30, 1976  
FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES  
DOYLE CONNER, COMMISSIONER OF AGRICULTURE

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## Letter of Transmittal

The Honorable Reubin O'D. Askew  
Governor of Florida  
Tallahassee, Florida 32304

Dear Governor:

To fulfill statutory requirements, it is my pleasure to submit to you and members of the state legislature, the 46th annual report of the Florida Department of Agriculture and Consumer Services.

This report lists and points out the services and programs provided by the department for the fiscal year from July 1, 1975 to June 30, 1976. The information contained in this report will reflect the increased importance of the changes in agriculture and consumer needs in our state.

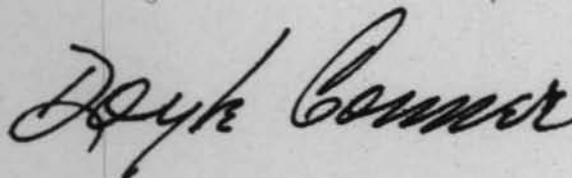
Not only has Florida agriculture continued to grow, but the public has become increasingly aware of activities in the area of consumer services.

There have been significant advances in every division within our department. But to conserve paper and other costs, this report will highlight only a few of the major priorities during the year.

I wish to express my appreciation to all department employees for their dedication and spirit. By like token we are grateful for the assistance and cooperation which we received from every segment of related industries and from all levels of state government.

We offer this report for your consideration and information.

Cordially yours,

A handwritten signature in dark ink, reading "Doyle Conner". The signature is written in a cursive, flowing style. Above the signature, there is a small, faint circular mark.

Doyle Conner  
Commissioner



Doyle E. Conner became Florida's seventh Commissioner of Agriculture in January, 1961. Prior to his election to this office Conner served 10 years in the state legislature and was the youngest member ever to be elected Speaker of the House. Conner was born in Starke, Fla. on December 17, 1928 and was graduated from the University of Florida with a bachelor's degree in agriculture. He is a past president of the University of Florida Alumni Association, National Association of State Departments of Agriculture and Southern United States Trade Association. In early 1976 Conner was named one of 76 "Florida Patriots" by the Florida Bicentennial Commission.

Harold H. Hoffman became Assistant Commissioner of Agriculture in April, 1965. He joined the department in 1940 as a chemist in the Division of Chemistry's feed laboratory, was named laboratory chief in 1948 and associate state chemist in 1959.

Born March 29, 1914, in Jefferson County, Nebr., Mr. Hoffman attended elementary and secondary schools in Winter Haven, Fla. He was graduated from the University of Florida in 1938 with a bachelor's degree in chemistry.





# DIVISION OF ADMINISTRATION



*John S. Shipp was appointed director of the Division of Administration on November 1, 1975. Prior to this he had been employed by the state treasurer's office and the Department of Education as well as having served for six years in the Florida House during the late 1950's. Shipp holds a bachelor's degree from the University of Florida as well as a master's degree from Florida State University. He was born in Williamson, Ga. on March 17, 1918 and served both in the army and navy during World War II. In addition to his service with the state, Shipp also has experience as a school teacher/administrator and as a publishing company executive.*

## Finance and Accounting

The Finance and Accounting Unit is responsible for all departmental revenues and expenditures. These totaled \$51,910,683 and \$49,614,791 respectively in 1975-76. Other functions of the unit include property management, federal grant in aid activity, planning, and budgeting. The unit will continue its functions in these areas and if funded will add teleprocessing capabilities during 1977-78 to allow on-line data processing communications.

## General Services

The Bureau of General Services is responsible for departmental purchasing, maintenance, grounds, duplicating and printing, mail distribution, supplies, communication, and coordinating all records management with Board of Archives and Records Management. Work involves the development of procedures necessary to carry out these responsibilities.

Purchasing is responsible for writing, checking or revising specifications, preparing and mailing bid invitations to prospective vendors, checking requisitions prepared by other divisions and issuing purchase orders.

Maintenance section is responsible for maintaining heating and air conditioning, custodial cleaning and security for the Mayo Building and Laboratory Complex.

Grounds maintenance section is responsible for the maintaining, beautifying and landscaping of 112 acres.

Supply section is responsible for requisitioning, storing and issuing supplies to all eleven divisions in the department.

Mail distribution section is responsible for the distribution of all department incoming, outgoing and interoffice mail in the Tallahassee offices. They remove all revenue and type a daily cash report.

Communication consists of two consoles and two operators who are responsible for handling incoming and outgoing WATS calls for the department.

Printing section is responsible for duplicating and printing a wide variety of departmental forms, informational material, reports and similar material on a continuing basis.

## Information Research Services

This bureau is responsible for providing the general public with information regarding those areas that come under department jurisdiction. In fulfilling that responsibility, the bureau processed 24,600 information inquiries during the fiscal year. In addition 259,674 pieces of literature were distributed.

Utilizing the cooperation of the various media, the bureau prepared 331 news stories for distribution. Broadcast items produced numbered 452 and kept the statewide agricultural radio

network supplied with accurate and timely agricultural information.

Five special educational manuscripts and 70 speeches were also prepared by bureau information specialists. A staff photographer completed 260 photography assignments.

The bureau is also responsible for editing the annual report and an employee newsletter. Among the major publications revised during the fiscal year were, "Summarizing Florida Agriculture," "Vegetable Gardening in Florida," and "Beef Cattle in Florida."

## Personnel

Personnel is responsible for the maintenance of the official records of this agency's employees, administration of the state uniform pay plan and for the administration and interpretation of the personnel rules and regulations of the Career Service System.

As a result of the Mayo Building renovation the Bureau of Personnel was able to move into new offices on the third floor in October, 1975. In addition to new office space a training room has been added which can accommodate 50 people and is available for use by all divisions. The Payroll section of Finance & Accounting now uses our office space to help facilitate transactions between Personnel and Payroll. With these changes we have been able to render a better service in meeting both employee and administrative needs.

The major impact of the 1974 Collective Bargaining legislation is still pending. There are still no collective bargaining units affecting the Department of Agriculture and Consumer Services but we are continuing our program of providing relevant information to supervisory personnel.

1975-76 brought a significant increase of activity in the area of equal employment opportunity. This bureau is providing information regarding the department's Affirmative Action Program to all divisions. Training programs were conducted during the year providing all supervisors with at least eight hours of instruction on the implementation and administration of the Affirmative Action Program.

Personnel requested the assistance of the State Division of Personnel's classification section in conducting an agency-wide impartial audit to insure all employees are properly classified and paid for the work performed. This audit commenced in 1975 and is being conducted on a division by division basis. It is now in the review stage and results should be promulgated in the near future.

The 1976 Legislature made provisions for a salary increase to state employees. The date of implementation was July 1, 1976. The upward salary increases were of three different types — competitive, special and incentive.

All employees on the active payroll on June 30, 1976 had their anniversary dates changed to July 1, 1976 in accordance with salary adjustment instructions.

Due to the general economic recession, employee turnover decreased markedly and the number of persons applying for work increased. More qualified applicants are available for work than in the past five years and our divisions are not experiencing the recruiting problems that were, in many instances, acute in the past.

**Florida Department of Agriculture & Consumer Services  
Statement of Revenue and Expenditures  
For the Fiscal Year July 1, 1975 through June 30, 1976**

Revenue: (By Sources)	AMOUNT	% OF TOTAL
Charges for Current Services		
Licenses and Permits	\$18,966,487	36.5
Use of Money and Property	168,513	.3
Other Agencies	3,411,317	6.6
General Revenue	4,021,135	7.7
Agency Revenue	24,477,374	47.2
	865,857	1.7
Totals	\$51,910,683	100.0
Expenditures:		
Salaries and Benefits	\$33,471,996	67.5
Other Personal Services	1,419,488	2.9
Expenses	8,589,013	17.3
Operating Capital Outlay	1,608,257	3.2
Fixed Capital Outlay	1,962,802	3.9
Certifications Forward	953,427	1.9
Agency Expenditures	865,857	1.8
Data Processing Services	356,850	.7
Payment of Debt Services	387,101	.8
Totals	\$49,614,791	100.0

# DIVISION OF ANIMAL INDUSTRY



*Dr. Clarence L. Campbell received his veterinary medicine degree from Ohio State University in 1945. Later that year he joined the Florida Livestock Sanitary Board as a field veterinarian. He became assistant state veterinarian in 1948, acting state veterinarian in 1952 and state veterinarian in 1953. Dr. Campbell was born September 24, 1921 in Indianapolis, Ind., attending Sebring, Fla., public schools and Florida Southern College.*

The Division of Animal Industry conducts a variety of programs pertaining to the health and welfare of the state's livestock industry and for the protection of the consumer. Major animal disease control programs and the meat and poultry inspection program are conducted in cooperation with the U.S. Department of Agriculture Animal and Plant Health Inspection Service.

The Animal Industry Technical Council, composed of 10 members from the various segments of the livestock industry, serves as an advisory group to the Commissioner of Agriculture and the Director of Animal Industry. The council held five meetings during 1975-76, which afforded industry members and the public an opportunity for input into policies and procedures affecting the operations of the division.

## Administration

The administrative unit provides direction and supervision for all operating programs and activities of the division. Support services, including purchasing, clerical and fiscal functions are also furnished by this unit.

## Maintenance Unit

This unit provided continuous maintenance services for the division's fleet of 56 automotive vehicles and for the five diagnostic laboratories located throughout the state. Service of this unit also included inventory of field rolling stock and other equipment, and maintenance of central storage facilities.

## Marks and Brands Unit

As of June 30, 1976, there was a total of 10,282 active livestock brands recorded with this unit. During this period the fee for brand recordation was increased from \$1 to \$10, to be effective July 1, 1976.

Investigators of this unit assigned in the investigation of 98 complaints of missing, stolen or illegally slaughtered livestock and farm related equipment. Total value of the 444 animals reported stolen was \$119,545. Equipment stolen included trailers, saddles, bridles and other tack, and animal feed valued at \$23,756.

During the period 18 persons were arrested and charged with 20 counts of grand larceny in thefts of livestock and related equipment and placed under bonds amounting to \$18,500. Disposition of all cases is not complete as of this reporting. 104 animals, two trailers and other miscellaneous equipment were recovered, total recovery value of which was \$40,807.

Members of this unit appeared before several law enforcement and industry organizations and discussed problems involved in the prevention and investigation of livestock thefts. The chief investigator participated in eight cow-calf clinics sponsored by the University of Florida Institute of Food and Agricultural Sciences.

During the year a survey was commenced to determine if any of the states require identification of farm equipment with serial numbers, title registration, or other methods, and whether it may be feasible to formulate a law or regulation to require manufacturers to place permanent identification numbers on farm implements, and require title registration of all farm equipment. Results of the survey are now being evaluated.

## Contagious and Infectious Diseases

Surveillance for livestock diseases and disease vectors at livestock markets and on farms is the major activity of the employees of this bureau. Inspections were conducted on all cattle, swine and horses entering the 31 sales facilities under supervision, and routine inspections were conducted on farms on a systematic basis.

Inspections for cattle fever ticks and screwworms were intensified due to serious infestations in Texas and other southwestern states. All specimens collected in Florida were of harmless varieties.

An extensive outbreak of hog cholera occurred in four New England states, and more rigid surveillance of swine movements and more frequent inspections of garbage fed swine were instituted. No sick animals were observed, and Florida remains hog cholera free.

The incidence of equine infectious anemia (swamp fever) has been reduced to slightly more than 2% infection. Equine animals moving to shows, sales, or other public assembly points are required to be tested, and employees of this bureau are responsible for identifying and maintaining quarantines on animals found to be reactors to the test.

Two cases of equine piroplasmosis (tick fever) were found during the year, one in Dade County and one in Hillsborough. Both animals were imported. The Dade horse came from Puerto Rico in 1973 and the Hillsborough animal originated in Portugal and was shipped to Florida in 1969. The latter case was successfully treated under supervision of personnel of this bureau, and was released from quarantine. The tropical horse tick, vector of equine piroplasmosis, was found on 893 horses and all animals on the infested premises are maintained in quarantine and systematically treated and sprayed to eliminate the tick vector.

Employees of this Bureau assist in the brucellosis program by backtagging adult cattle at markets for test at slaughter, and identifying cattle from exposed herds passing through markets to prevent their sale for breeding purposes.

## Poultry Services

The Bureau of Poultry Services is responsible for control and eradication of infectious and contagious diseases of poultry. The bureau also administers the National Poultry Improvement Plan in the state of Florida.



Specific disease control programs are conducted in regard to *S. pullorum*, *M. synoviae*, fowl typhoid, and *M. gallisepticum*. In addition, the bureau directs epidemiological investigations and enforces control measures, including quarantine and eradication, when a poultry disease constitutes a threat to the poultry population of the state, such as infectious laryngotracheitis or exotic Newcastle disease.

Periodic inspections and tests at hatcheries must be made to assure that standards of sanitation and disease criteria are met. Hatchery air and swab sampling for presence of bacteria is routinely employed during hatchery inspections.

The bureau continued to enforce the law requiring all hatcheries and poultry farms to provide for sanitary disposal of dead birds and hatchery residue. Eleven hundred poultry farms and hatcheries have been issued certificates of compliance of their dead bird disposal facilities. During the year, 890 disposal facility inspections were performed.

The bureau issued permits for importation of poultry into the state. During the 12 month period ending June 30, 1976, 94 permits covering 1,200,000 birds were issued for importation into the state. During the same period, health certificates for export purposes were issued covering 6 million dozen hatching eggs, 14.7 million chicks, 172,000 ducks, 100,000 poults, and 70,000 miscellaneous birds.

All poultry, including exhibition, exotic, and game birds going to public exhibition must come from pullorum-typhoid clean sources, or have a negative test prior to admission. This fiscal year, birds were inspected and tested at 44 fairs in the state.

Regulations of the USDA Animal and Plant Health Inspection Service allow commercial lots of pet, zoological and exotic birds to be brought into the United States and held in USDA approved quarantine facilities furnished by the importer for a minimum of 30 days. While in quarantine, the birds are under Veterinary Services supervision for examinations and tests to make sure they are free of exotic Newcastle or other infectious diseases. There are nine of these quarantine facilities in the Miami area. Personnel from the Bureau of Poultry Services regularly review their activities, including on-site inspections.

#### Brucellosis and Tuberculosis

At the close of 1975-76, there were 418 brucellosis infected beef herds and 85 infected dairy herds in the state. This is an increase of 127 infected herds over last year. Over 28,000 individual animals reacted to test either on the farm, at markets or at slaughter. The increase in brucellosis infection can, in part, be attributed to (1) deemphasis on calf vaccination which has

decreased the number of protected herd replacements; (2) insufficient field personnel to maintain desired testing schedules in infected herds; and (3) a lack of confidence in the program by industry. Adult vaccination studies are currently underway in five Florida herds to determine if this procedure will be of value in controlling brucellosis infection in the large problem herds, and an intensification of the calf vaccination program is being promoted within the state and in those states which ship herd replacements into Florida.

One dairy herd was found to be infected with tuberculosis, making a total of two TB infected herds now in the state. The two herds consist of approximately 3,000 head of cattle.

#### Diagnostic Laboratories

Diagnostic Laboratories has had a year of increased activity covering all species of animals. Activity ranged from autopsies of all kinds, including snakes and alligators, to a variety of serologic, bacteriologic, virologic, histopathologic, chemical and parasitologic tests. The material varied from preserved, to fresh, to unsatisfactory putrified specimens. This all reflects greater client use of the laboratories.

Major emphasis at the main laboratory in Kissimmee is on bovine and equine diseases, with histopathological examinations of tissues from all species. The Dade City branch laboratory is primarily concerned with poultry, but plans are in progress to qualify this facility for conducting tests for equine infectious anemia. The Cottondale, Live Oak, and Miami branch labs all conduct EIA tests as well as routine tests on all species.

The most common disease conditions diagnosed are pneumonias, parasitisms, clostridium infections and respiratory and digestive viral conditions.

#### Meat Inspection

There was considerable activity in the meat packing industry during the past year involving new construction to supply local market demands for meat products. Inspection was granted to 19 new slaughter plants and 6 processing plants during the year. Eleven new custom exempt plans were granted supervision.

The state meat inspection program is operated under federal guidelines and rules and is financed on a 50-50 matching basis by state and federal funds. No significant changes in meat inspection procedures occurred during the year.

#### Animal Industry Technical Council

R.D. BENNETT.....	Beef Industry
GERALD CAYSON.....	Beef Industry
JOE A. HILLIARD.....	Beef Industry
O.L. PARTIN, Chairman.....	Beef Industry
ROBERT W. HALL.....	Dairy Industry
JOE M. O'FARRELL.....	Horse Industry
PETE CLEMONS, Vice Chairman.....	Independent Agricultural Markets
ERWIN BRYAN.....	Meat Packing Establishments
HENRY W. LAND.....	Poultry Industry
ELLIS PUTNAL.....	Swine Industry

C.L. CAMPBELL, D.V.M.  
State Veterinarian and Director



**STATISTICAL INFORMATION**  
Division of Animal Industry

**Bureau of Brucellosis and Tuberculosis**

Cattle Tested for Brucellosis .....	887,565
Percent of Cattle Infected .....	2.38
Swine Tested for Brucellosis .....	1,167
Percent of Swine Infected .....	.09
Cattle Backtagged at Markets .....	183,112
Cattle Tested at Slaughtering Establishments .....	263,802
Percent of Cattle Infected .....	1.97
Calves Vaccinated .....	73,172
Cattle Tested for Tuberculosis .....	44,297
Percent of Cattle Infected .....	.85

**Bureau of Contagious and Infectious Diseases**

Cattle Inspected at Livestock Markets .....	920,437
Swine Inspected at Livestock Markets .....	306,087
Livestock Inspected on Farms .....	1,489,215
Garbage Feeders .....	512
Swine Fed Garbage .....	32,702

**Bureau of Poultry Services**

Hatchery Inspections .....	125
Birds Tested for Pullorum Disease .....	1,026,260
Birds Tested for M. Gallisepticum .....	1,167,763
Foreign Exports, Baby Chicks .....	14,745,131
Foreign Exports, Hatching Eggs, doz. ....	6,072,449.5

**Bureau of Meat Inspection**

Animals Slaughtered .....	389,773
Poultry Slaughtered .....	7,259,017
Red Meat Products Produced Under Inspection, lbs. ....	629,741,645
Red Meat Products Condemed, lbs. ....	3,804,166
Poultry Products Produced Under Inspection, lbs. ....	164,494,951
Poultry Products Condemed on Ante-mortem, lbs. ....	99,210
Poultry Products Condemed on Post-mortem, lbs. ....	751,014
Products Certified, lbs. ....	4,742,861
Products Rejected for Certification, lbs. ....	65,191

**Bureau of Diagnostic Laboratories**

Cases Submitted .....	60,685
Tests Performed .....	270,881

**Equine Disease Control Program**

Animals Sprayed and Inspected .....	64,300
Horses Tested for Equine Infectious Anemia .....	66,171
Percent of Horses Infected .....	2.07

**Marks and Brands Unit**

Theft Complaints Investigated .....	98
Theft Warrants Secured .....	34
Brand Certificates Issued .....	276
Livestock Hauler's Permits Issued .....	945



# DIVISION OF CHEMISTRY

*Dr. Charles H. Van Middeltem, director of the Division of Chemistry since September 1, 1973, was born August 6, 1919 in Bruges, Belgium. He received a bachelor's degree in 1944 and a Ph.D in biochemistry in 1952 from Cornell University. From 1952 to 1973, he was on the research faculty staff with the Institute of Food and Agricultural Sciences, University of Florida, and was in charge of the Pesticide Research Laboratory in Gainesville.*

The Division of Chemistry has the primary responsibility for conducting laboratory analyses on samples submitted by state agencies and for providing, when necessary, technical evaluations to enforce the following six chapters of the Florida Statutes: pesticide; food, drug and cosmetic; commercial fertilizer; commercial feed; seed certification; and seed. The laboratories of this division conduct various chemical, microbiological and physical analyses in order to test and evaluate a wide variety of products sold in the state for the protection of Florida consumers.

Examples of the type of technical assistance provided by personnel of this division to assure compliance with appropriate state laws are as follows: (1) approve applications for registration of fertilizer, (2) review food labels, (3) examine pesticide labels presented for registration and (4) verify seed labels.

Samples to be analyzed, examined or tested are usually obtained through inspectors employed by the various divisions in this department or from other state agencies and forwarded to one of our laboratories. If the laboratory analyses indicate the sample is illegal, subsequent enforcement action is the responsibility of the division or state agency through which the sample originated.

The Division of Chemistry was authorized 100 F.T.E. positions during the year, of which eight were located in laboratories in central and south Florida, and four inspectors assigned the responsibility for furnishing official samples to the laboratories. The division is composed of the following laboratories and sections: pesticide residue, fertilizer, feed, seed, food, pesticide, commodity testing, methods development, laboratory services and administration.

Several laboratories obtained some urgently required new instrumentation which significantly increased their analytical versatility. The division laboratories analyzed over 57,000 samples of food, feed, seed, fertilizer, pesticide formulations, pesticide residues and other commodities during the year. Approximately 370,000 separate determinations, tests and observations were completed on these samples, despite the fact that four authorized positions were voluntarily kept vacant for a majority of the fiscal year.

## Pesticide Residue Laboratory

The responsibility of this laboratory is to assure the public that there are no harmful concentrations of pesticides, heavy metals or other toxicants in foods and animal feeds. During this year, the laboratories performed 17,285 analyses on 7,925 samples, of which 6,885 were official samples. Approximately 3.5% of the official samples were violative and appropriate action was taken. Included in the laboratory sample load were 775 samples analyzed under a contract with the U.S. Food and Drug Administration.

During the year the assigned field inspectors conducted 4,296 inspections on farms, packinghouses, warehouses, retail outlets,

etc., and obtained 3,642 fresh vegetable samples for pesticide residue analysis by the laboratories.

Surveys for heavy metals were conducted on a variety of food and feed products and no abnormally high concentrations were found. Selective monitoring for above tolerance traces of heavy metals and other toxicants in food and feeds will continue for the foreseeable future.

Several changes in analytical procedures have resulted in significant savings in the usage of solvents in all laboratories. With the cooperation of the Methods Development Laboratory, a high pressure liquid chromatography method was developed for a pesticide previously very difficult to analyze with existing equipment.

## Pesticide Laboratory

This laboratory operates under the Florida Pesticide Law, which provides protection for the home gardener as well as the commercial user of pesticides. Under this act every pesticide distributed, sold or offered for sale in Florida must be registered with the state. One of the main responsibilities of this laboratory is to analyze all pesticide samples submitted to determine whether the percentages of guaranteed active ingredients in the formulation are within the tolerance allowed in the pesticide act. Pesticide labels presented for state registration are examined to verify their conformance with the act and to recommend any corrections necessary to secure registration.

Deficiencies for the four quarters of the year were 7.7%, 5.9%, 5.6%, and 4.5% respectively, illustrating a consistent decrease. The 4.5% is probably one of the lowest deficiency percentages ever noted for a three-month period. During the year, nine pesticide samples were analyzed and reported in the AAPCO Check Sample Program and the results were found to compare favorably with the equivalent sample data reported by the other cooperating laboratories. Collaborative studies involving gas chromatographic and infrared analytical procedures were conducted with laboratories of the Environmental Protection Agency and two manufacturers of Cotran, Resmethrin and encapsulated methyl parathion.

A reporting form which combines the laboratory work card and the deficiency and legal reports into one consolidated report was developed during the year, resulting in a considerable saving of typing time. During the year, analyses of citrus spray oils prevented 600,000 gallons of oil that did not meet specifications from being shipped into Florida. The laboratory analyzed 7,037 samples, on which over 16,000 separate determinations were conducted.

## Fertilizer Laboratory

This laboratory is responsible for the analytical and technical phases of the enforcement of the Florida Commercial Fertilizer



Law. Official samples of commercial fertilizers offered for sale in Florida are analyzed for the primary plant nutrients, nitrogen and its components, available phosphoric acid and soluble potash. Secondary plant nutrients such as magnesium, manganese, copper, zinc, iron, boron, chlorine, sulfur, etc., are also analyzed when guaranteed. Samples of dolomite, limestone and gypsum are analyzed to determine if the guarantees are met as to content of calcium and magnesium. Microscopic examinations of fertilizer samples are made to verify the source materials stated on the label and detect discrepancies.

A state chemist fertilizer analysis report is mailed to the manufacturer, dealer and consumer involved with each sample. If the laboratory analysis indicates that any ingredient falls outside the legal tolerance, the sample is reported as deficient and a monetary penalty is assessed. This penalty is paid to the consumer by the manufacturer. A computerized system for handling laboratory data and preparing analysis reports is being utilized and has greatly simplified the quarterly report preparation and compilation of other data.

The fertilizer laboratory checks labels which accompany samples of commercial fertilizers to determine if all guarantees and claims are compatible with the ingredients present.

This laboratory conducted approximately 102,240 separate laboratory determinations on the 9,227 samples analyzed during the year, of which over 21% were deficient.

#### Feed Laboratory

This laboratory conducts analyses on all types of animal feed sold in Florida, thereby assuring these feeds are in compliance with the provisions of the Florida Commercial Feed Law. When necessary, laboratory analytical data are used as legal evidence to gain compliance with the law. The major portion of this laboratory's analytical effort is devoted to cattle, poultry, horse and swine feeds. Determinations conducted on these samples are for protein, fat and fiber as well as routine analysis for moisture, ash, equivalent protein from non-protein nitrogen and total sugars.

Analyses are also made for minerals guaranteed on the label such as calcium, phosphorus, salt, iron, copper, cobalt, manganese, magnesium and zinc. Medicated feed additives commonly used in cattle, poultry and swine rations such as coccidiostats, wormers or medications to aid in stimulating growth or improve feed efficiency are also analyzed. The antibiotics, chlortetracycline, oxytetracycline and penicillin, used as additives and certain vitamins are determined. A thorough microscopic examination is made on each official sample. Findings are checked against ingredients claimed and any differences are noted and reported.

The Cooperative Forage Testing Program with the IFAS Cooperative Extension Service is now in its tenth year. Contractual agreement with FDA funding for analyses of medicated feed samples taken in connection with inspectors medicated feed mill inspection was maintained during the year and plans are to continue this program during the next fiscal year. The laboratory completed 72,891 separate determinations on 7,637 samples received.

#### Seed Laboratory

The laboratory conducted purity and germination tests to determine the quality of seed offered for sale to Florida consumers on 11,653 samples, which required over 40,000 separate determinations. Approximately 500 samples were "grown-out" in test plots adjacent to the laboratory to determine trueness to variety.

The purity testing requires the separation of the sample into pure seed, inert matter, other crop seed and weed seed. All weed and crop seed have to be identified. A larger portion is then examined for the presence of noxious weed seed.

The field "grow-out" test is required on seed that cannot be identified by seed characteristics. These tests require from two to four months to complete, depending on kind and variety. Official complaints from eight farmers were investigated, visits were made to the farms, meetings held and recommendations issued.

#### Food Laboratory

Since food safety and food quality has a direct immediate effect on all consumers, this laboratory attempts to assure a safe, wholesome, and properly represented food supply by performing chemical, physical and bacterial tests on foods consumed in Florida. These analyses are conducted on samples from food processors, both at the retail and warehouse level, as well as on foods from consumers and other state agencies. Assistance is offered to both consumers and processors in areas of food labeling and regulatory advice.

During the fiscal year, the Food Laboratory analyzed food products from 843 Florida food processors. During this period, a total of 10,688 food samples were tested with a total of 91,917 individual determinations. State action was initiated on 21.33% of these samples collected. Random samples are requested monthly from over 2,700 Florida food processors. In addition, many foods produced in other states but sold in Florida are surveyed for their compliance with regulations. Meat samples are received routinely from over 300 meat processors, and from other divisions of the department, other state and federal agencies and directly from consumers. Surveillance was increased on previous problem areas and more emphasis focused on foods having high safety risks.

The Food Chemistry Section increased analyses on such food antioxidants as BHA and BHT; screened many juices, punches, and sodas for preservative content; checked enrichment standards in various bakery goods and flours; surveyed lead and tin content in all types of canned foods and baby foods; detected machinery mold in fruits; scrutinized artificially colored foods to make sure approved colors were being used; determined breeding percentage on shrimp and salt content in smoked fish. Many foods were analyzed for their nutritional claims. With the banning of Red #2 in foods and the prohibited use of yellow color in bread continuing, identification of artificial colors in foods gained increased emphasis. An extensive effort was undertaken on samples collected on the state/federal contract for the inspection of bottling plants, bakeries and warehouses.

The Meat Chemistry Section screened for nitrite content in bacons and cured products, detected adulteration of meats with undeclared soy, identified seafoods by electrophoresis, and continued its routine analysis of meats for protein, moisture, fat, preservatives, nitrites, phosphates, added colors, and extenders such as nonfat dry milk, cereal and soya. Many meats were analyzed to determine highest cooking temperatures, and a study of methods to better quantitate nonfat dry milk was continued.

The Microbiology Section emphasized surveillance of high yeasts and molds in sodas and grainery products, microbial levels in ground meats and seafoods, and proper processing of low acid canned foods. Samples were analyzed for total numbers of bacteria (index of quality or decomposition); coliforms and *E. coli* (sanitation indexes); and the food poisoning bacteria *Staphylococcus*, *Salmonella*, and *Clostridium perfringens*.

Improved methods for sugars in honey, vitamins in foods, nonfat dry milk in meats, additives in soft drinks, antioxidants, and yeasts in foods were investigated.

Major analytical programs conducted for other state agencies included analysis of disinfectants and sanitizers for microbiological claims, analysis of food items before state purchase, and surveying of these same food items at the institutional level for HRS and DOR, and analysis of various juice products from dairy processors.



### Methods Development Laboratory

An important objective of methods development is to increase the analytical capability of the Division of Chemistry. During the past fiscal year, high pressure liquid chromatography (HPLC) was successfully adapted for the analysis of vitamins A, D, and E and naturally-occurring carotenes in several food types and for the analysis of carbohydrates, such as levulose, dextrose, sucrose, and maltose in honeys. HPLC has also been adapted for the detection of rodenticides (warfarin, Pival, chlorophacinone, diphacinone, sulfaquinoxaline, Fumarin) and herbicides ([A] Tordon, [B] 2, 4-D, [C] 2, 4, 5-T, [D] Silvex, [E] 2, 4-DB). A procedure for detecting residue levels of oxamyl on celery by HPLC has also been developed.

Other compounds that show promise for analyses by liquid chromatographic procedures are: natural poisons (aflatoxins B1, B2, G1, G2) in foods and feeds; residue levels of carbamate pesticides such as carbaryl, methomyl, and Baygon; food antioxidants: BHQ (3-t-Butyl-4-hydroxy phenol), BHA (3-t-Butyl-4-hydroxy anisole), and BHT (2,6-Ditertiary Butyl-p-cresol) in oils and food products; and urea in feeds. Representative samples are presently being analyzed by HPLC so that practical analytical methods for these important compounds will soon be available for use by the appropriate bureaus of the division.

### Commodity Testing Laboratory

The Department of General Services continued to utilize the test capabilities of this laboratory to (1) obtain information on the quality and performance of a wide variety of commodities to provide a basis for awarding state contracts for these items; (2) monitor the quality of and investigate complaints about the goods purchased from these contracts by various state agencies; and (3) establish more meaningful criteria from which state specifications may be created or revised. Currently, testing is being conducted on laundry supplies, paper, paint, office supplies, janitorial services, textiles, office and school room furniture, and a growing list of miscellaneous items. Cut paper specifications, developed by the Division of Purchasing from tests conducted by this laboratory, were adopted this year by the American Society for Testing and Materials and the National Association of State Purchasing Officials.

The mattress fire in Sanford Prison, in which eleven men lost their lives, prompted the formation of a Governor's Mattress Flammability Committee. Their recommendations have resulted in more vigorous testing by this laboratory of the flammability of mattress covers and cores and complete mattresses. New methods established during the year in the paint section were utilized not only by the Division of Purchasing but also by the purchasing agents of a number of counties, cities and local school districts in Florida.

A wide variety of janitorial supplies continued to be tested for the Department of Education to determine if they meet the specifications of the Florida School Plant Management Association. Products which comply with these specifications are placed on a certified list from which local schools can buy with greater confidence of obtaining quality products at competitive prices. Some schools are also having samples of the products they receive from the manufacturers tested to assure that they are of the same quality as those which were originally certified. The F.S.P.M.A. brought its total number of specifications to 19 this year by adopting requirements for three more products: Mild Acid General Purpose Cleaner, Cream Cleanser, and Solvent Gum Remover.

Total samples tested this year by this laboratory were 1,511 and included approximately 18,000 individual test observations. Of this total, the Department of Education submitted 67 samples and the remaining 1,444 were received from the Division of Purchasing.

### Laboratory Services

The primary duties of this section consist of receiving, preparing and distributing samples to the various laboratories for chemical, microbiological and physical testing. These samples shipped to Tallahassee primarily by official state field inspectors, consist of commercial fertilizers, feeds, seeds, formulated pesticides and various types of foods. Over 25,000 samples were processed by this section during the year.

All samples received are logged in and assigned an official code number to preserve the identity of each sample throughout the entire investigative procedure. This official number is referred to when necessary by the chemists involved, without prejudice as to the specific manufacturer, dealer or consumer. For the samples requiring extensive preparation prior to laboratory analysis, procedures recommended by the Association of Official Analytical Chemists are carefully followed.

This section also has the responsibility of compiling and organizing the semi-annual divisional orders for all types of chemicals and glassware as well as the proper dispensing of the supplies necessary for the daily operation of all of the laboratories in the division. An inventory is maintained by this section of all surplus chemicals, glassware, and other supplies in the division.



# DIVISION OF CONSUMER SERVICES

*Robert J. Bishop joined the department in 1967 to head a newly created Office of Consumer Services. Governmental reorganization elevated the office to division status July 1, 1969.*

*Mr. Bishop was born March 25, 1913 in Bishopville, Fla. He received a bachelor's degree in 1935 and a law degree in 1943 from the University of Florida. From 1943-48 he served as public relations counsel to the chain store industry, and executive director of Atlantic Union Committee, Inc. in 1949-50. He was a practicing attorney in Orlando from 1950 until he joined the department.*

*Mr. Bishop resigned at the end of the 1975-76 fiscal year to run for a circuit judgeship in Orange and Osceola counties. On August 11, 1976, Robert J. Bishop passed away in his home town of Orlando. He was a leader in the consumer area on both a state and national level.*



Since 1967, the Division of Consumer Services has served as Florida's statewide clearinghouse for consumer complaints. The office was started with a staff of two, who handled 114 complaints in the first year, and has expanded to its current size of 19, handling 13,470 complaints in 1975-76.

## Automobile Repair Hearings

From September to December of 1975, Commissioner Conner, members of the Florida Consumers' Council, and staff members of the Division of Consumer Services held public hearings on automobile repair problems. Participating in the hearings in Tampa, Orlando, Jacksonville and two in Miami, were both industry and consumer representatives who listened as individual consumers revealed the specifics of their problems, and the scope of the "industry" problem as well.

Subsequently, representatives of the automobile repair industry met with Commissioner Conner and Consumer Services staff members for the purpose of helping the industry design programs that would lessen the problems that consumers have with their automobiles. Specific program implementation began at the end of fiscal year 1975-76.

However, one fact which was revealed dealt solely with internal management problems within individual shops. Communications were breaking down between the business owners, their service managers and the mechanics when it came to resolving consumer complaints. Corrective action has already been implemented in many shops.

A massive educational media campaign was conducted in conjunction with these hearings. It is conservatively estimated that over one million Florida citizens were reminded of their rights and responsibilities under Florida laws concerning automobile repair. In addition, pamphlets on auto repair tips were published in English and Spanish for distribution statewide.

## Consumer Education

In 1962, President Kennedy articulated a Bill of Rights for consumers. They included the right to safety, the right to choose, the right to be informed and the right to be heard. In 1975 President Ford added a fifth consumer right, the right to consumer education. The concept is, that not only do consumers have the right to available information if they can find it, but additionally, they have the right to a conscientious consumer education program.

The staff of the Division of Consumer Services has worked closely with members of the school system to implement the "Free Enterprise and Consumer Education Law." In addition, we are taking an active role in educating consumers who are

outside the public school system. This has been accomplished through news releases to the various communications media, a monthly newsletter, speeches, seminars and other personal contacts, the distribution of printed literature, and through telephone calls. For example:

1. A monthly newsletter, "What's Cooking of Consumer Interest," is mailed to 5,000 households.
2. Approximately 10,000 households are reached through numerous speeches, educational seminars, and other types of public meetings conducted by personnel of this division each month.
3. Each month the division mails out an average of 25,000 pieces of educational literature on the rights and responsibilities of consumers.
4. Approximately 550,000 households in Florida are reached each month with our consumer alert news release to radio, television and newspapers.

## Consumer Protection

This bureau is legally responsible for serving as a clearinghouse for consumer complaints, with limited jurisdiction beyond that authority. Statistically, of the 13,470 complaints received, Consumer Services referred about 1,397 or 11% to other divisions within the Department of Agriculture and Consumer Services, other state, federal and local agencies. The remaining 12,000 complaints (or 89%), fell outside the boundaries of available specific assistance.

Concerning complaints which cannot be referred out, the Division of Consumer Services attempts to assist the consumer through informal methods. This includes writing or calling the business involved and further advising the consumer client of his or her rights. We exercise no legal authority over businesses in this state. Therefore, when it comes to individual complaints, we must rely on a good faith response to accomplish anything for the consumer.

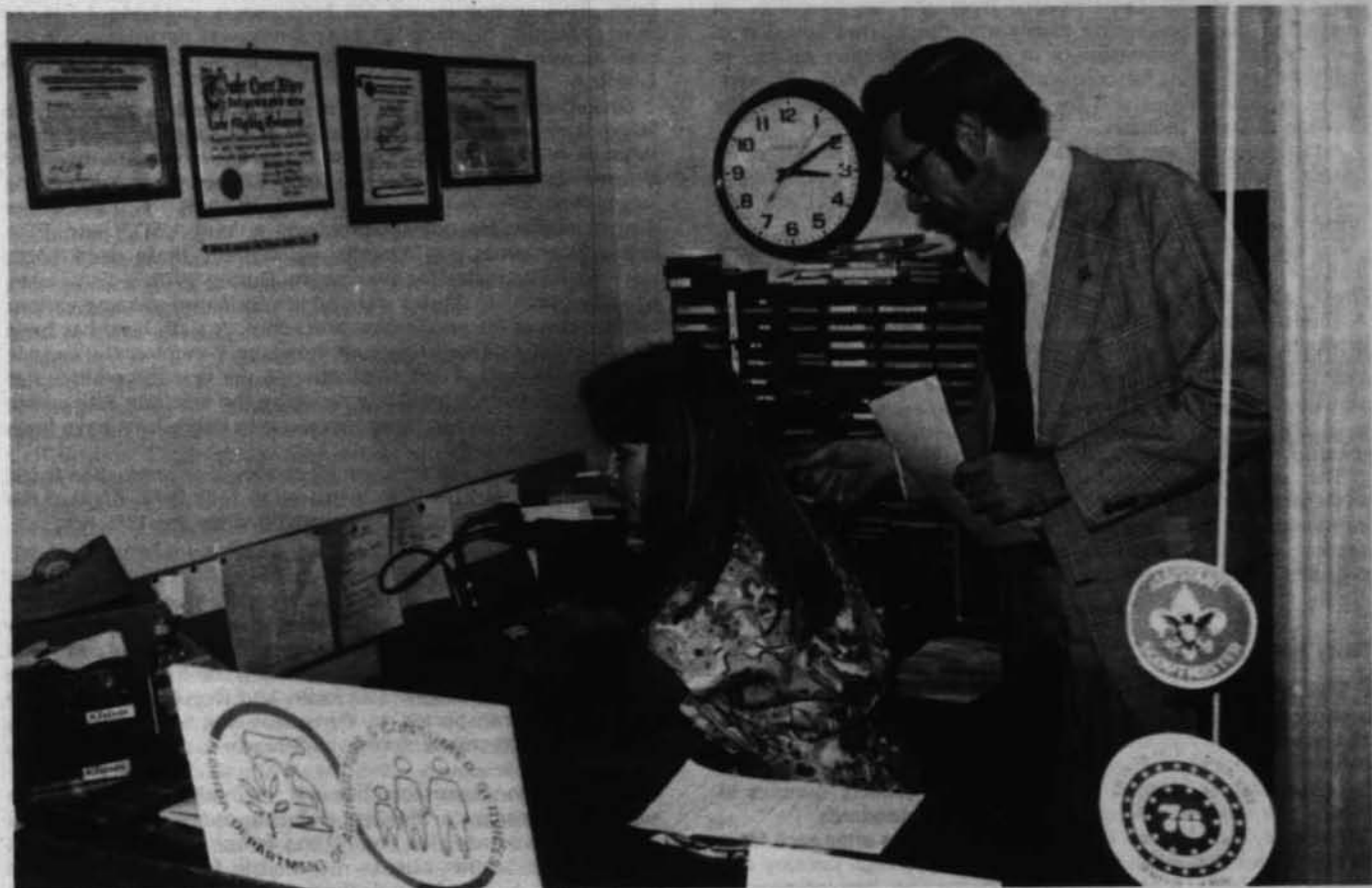
The top 10 consumer complaints in descending order of frequency for 1975-76 were: 1. motor vehicles; 2. mail order; 3. dwellings and contractors; 4. fuel; 5. food; 6. home furnishings; 7. advertising; 8. credit; 9. appliances; 10. mobile homes.

During the year, 40,697 pieces of mail pertaining only to complaints were sent out of the Tallahassee office. In addition, well over 6,953 WATS line calls were logged in.

Investigation is another phase of the division's function. In the last year numerous field investigations were conducted. These included the following: an Ocala candy franchise investigation resulted in \$17,000 in refunds to consumers and three felony indictments. A \$3,060 refund was obtained from a computer dating club in Tampa. An investigation of Don Thompson Social Clubs resulted in an indictment on three counts of grand larceny

and a court award of \$3,960 restitution to consumers. (Unfortunately, this represented only a small fraction of the \$33,104 our investigators revealed was owed to consumers, and points to the need for better communication with our court system.) An investigation of Steve Spurrier Golden Door Health

Spa, Inc., found consumers losing \$49,834. Although a Writ of Voluntary Compliance was obtained for that amount, bankruptcy was the rationale for allowing a voluntary dismissal of that judgement.





# DIVISION OF DAIRY INDUSTRY

Jay Boosinger, 36, director of the Division of Dairy Industry, is a graduate of Manatee County High School, Bradenton, and a 1961 graduate of the University of Florida, where he received a bachelors degree in Dairy from the College of Agriculture. He served as dairy specialist with the division from 1964 to 1967, when he was appointed assistant director of the division, a position he held until his appointment as director in February 1976.

Boosinger was named sanitarian of the year for 1972-73 by the Florida Association of Milk, Food and Environmental Sanitarians and is currently president of the organization. He also is vice chairman of the National Conference on Interstate Milk Shipments and serves as chairman of one of the three National Councils on Interstate Milk Shipments governing councils. He also has been president of the Southern States Dairy Divisions of National Association of State Departments of Agriculture and past chairman of the Florida Milk Quality Council.



The Division of Dairy Industry enforces the Florida Milk and Milk Products Law, and the Florida Ice Cream and Frozen Desserts Law. The division has statewide jurisdiction for the enforcement of both laws.

There are four operating sections which work together to insure that only high quality milk, milk products and frozen desserts are sold to Florida consumers. The four sections in the Dairy Division are: administration, dairy farm inspection, dairy products inspection and dairy products laboratories. The dairy division has 49 personnel.

The 1976 Legislative session passed legislation which requires the shelf life date to be placed on Grade A Milk and Milk Products containers in contrasting color to the background. This piece of legislation will help consumers identify the age of these products more rapidly at the point of sale.

The 1976 Legislative session also passed a bill which removed the County Health Departments from the responsibility of inspecting dairy processing plants and the Florida Division of Health from the responsibility of making sanitation ratings of milksheds in Florida for certification of interstate milk shippers. These responsibilities will be performed in the future by the Division of Dairy Industry.

A Definition bill was also passed which will bring several dairy product standards of identity into line with federal standards.

All of these bills will become law in the 1976-77 fiscal year and present quite a challenge for the division.

During the 1975-76 fiscal year the dairy division regulatory activities were again rated by the Florida Division of Health and check rated by the U.S. Public Health Service, Food and Drug Administration, to insure that the quality of Florida milk and milk products sold in interstate commerce met the specifications of the U.S. Public Health Service Pasteurized Milk Ordinance.

## Administrative Section

The administrative section is composed of a director, an assistant director, and their secretaries, who furnish administrative direction and support for the dairy farm inspection section, the dairy products inspection section, and the dairy products laboratory section.

## Dairy Farm Inspection

The dairy farm inspection section is responsible for all raw milk produced in Florida. This section makes sanitary inspections of all dairy farms in Florida as required by law, to see that each farm is operated in a sanitary manner and that the raw milk produced is of the highest quality. This section also collects samples to insure that the raw milk meets rigid quality standards.

The dairy farm section issues permits to farms after each farm demonstrates that it can maintain the required high sanitary and quality standards. It approves new construction, new equipment

installation, and any renovation to existing equipment or facility. It inspects bulk milk transports at the farm, insures that proper milking procedures are followed, and insures that each farm observes Florida's rigid animal health regulations.

During 1975-76 the number of Florida dairy farms decreased to 410 from 420 the previous year. The dairy cattle population decreased to 198,000 from 201,000 in 1974. However, milk production per cow increased from 9,328 pounds to 9,889 pounds. The high cost of production continues to be a problem for dairymen in this area. Increased feed costs, equipment costs and fertilizer costs all contribute to the high cost of production. The labor market has become unstable even though economic conditions continue to improve.

This section made 5,971 inspections on Florida's 410 dairy farms for an average of 14 to 15 inspections per farm for the year, and collected 4,039 samples for analysis, an average of 10 per farm. This section issued 128 hold orders involving 1,744,664 pounds of milk, of which 163,624 pounds were destroyed, 578,952 pounds were degraded and 1,002,088 pounds were released to Grade A.

Brucellosis continues to be a serious problem especially in large dairy herds due directly to the close confinement of these large dairy herds. An average of 85 herds were quarantined for Brucellosis during this past year with 62% of these herds being larger than 500 cows. During 1974-75, in an effort to get better control of the Brucellosis problem, a joint USDA and FDA research program was established whereby three dairy herds were adult vaccinated for the disease. During 1975-76 fiscal year, two other problem dairies were adult vaccinated utilizing various applications of the vaccination procedure. A sixth herd has been approved for a different vaccine, however, receipt of the vaccine has been delayed. Adult vaccination of the first three herds has shown very positive results in reducing the infection rate within the herds and losses in these herds due to Brucellosis have been substantially reduced.

The 1975 Honor Roll program for quality milk production listed 42 dairymen as recipients as compared to 36 in 1974. Eight of the 1974 Honor Roll dairymen again qualified for the 1975 list.

## Dairy Products Inspection

The dairy products inspection section is responsible for implementing the provisions of the Florida Milk and Milk Products Law and Rules and Regulations, the Florida Ice Cream and Frozen Desserts Law and Rules and Regulations, from the time milk is transported to the processing facility until it is packaged in its many forms and reaches the hands of the consumer.

This section is responsible for maintaining a sanitation surveillance program through unannounced inspections of all milk, milk products, ice cream and frozen desserts plants in Florida. This section also is responsible for establishing and maintaining a simple collection program for all products

produced by processing plants under its regulatory supervision, as well as those products which are shipped in packaged form to Florida from other states.

The dairy products inspection section is responsible for reviewing plans for and approving all new equipment installation, all new construction and renovation occurring in milk, milk products and frozen desserts plants in Florida and inspecting bulk milk, cream and condensed milk transports at the processing plants. This section also is responsible for maintaining a shelf life surveillance program and insures that all milk and milk products sold to Florida consumers are legibly dated with the final date the product should be offered for sale and that the products will be acceptable to consumers for at least four days after the shelf life expiration date stamped on the product container.

The dairy products inspection section is responsible for reviewing and approving labels for all products under its regulatory supervision before they are introduced into the Florida market place to insure compliance with truth-in-packaging laws and the Fair Packaging and Labeling Act.

During the fiscal year 1975-76, this section regulated 43 Florida milk and milk products plants and 87 milk and milk products distributors, as well as 41 ice cream and frozen desserts plants. Additionally, this section maintained a sampling surveillance program on products from 52 milk and milk products plants and 80 frozen desserts plants from out of state.

This section was responsible for collecting 7,231 official samples and made 3,795 inspections of these plants. Dairy specialists from this section were in each Florida processing plant making inspections an average of 45 times during the fiscal year. This section also made 298 pasteurizer checks on equipment used by Florida processors. It issued 109 citations on 1,557,432 pounds of dairy products. Of this amount, 1,111,529 pounds were destroyed, 124,698 were diverted to ungraded products and 315,059 pounds were released for Grade A use. We also returned to the state of origin 6,146 pounds of milk and milk products, which upon analysis and inspection, did not meet Florida's standards.

#### Dairy Products Laboratories

The dairy products laboratory section performs regular analysis on all milk, milk products and frozen desserts samples submitted by the dairy farm and dairy products sections sampling surveillance program. Samples collected at stores by the Division of Inspection are also tested. It is of the utmost importance that this section maintain the ability to accurately and uniformly analyze these samples.

This section is composed of six laboratories geographically located throughout Florida to insure adequate laboratory coverage for timely analyses of product samples. This section conducts the Florida Department of Agriculture Milk Laboratory Certification Program in conjunction with the United States Public Health Service to insure that all milk laboratories run analyses in a uniform manner. This program insures that results obtained on a sample in South Florida would be repeated should the same sample be run in the Florida Panhandle.

The dairy laboratory which is located on I-75 close to the Georgia border samples and analyzes raw milk and bulk tankers of pasteurized cream, condensed and blends which are shipped into Florida from other states. During the 1975-76 fiscal year this laboratory analyzed samples from most of the 2010 transport loads of raw milk and 798 transport loads of other bulk dairy products imported into Florida.

Fifty-nine loads of raw milk (approximately 2,891,000 pounds) were rejected for failing to meet Florida standards, representing a rejection rate of 2.9%. Three out of state processors were stopped from importing bulk transports of pasteurized cream because they could not meet Florida sanitation standards.

Florida is the only state which requires by actual laboratory tests that fluid dairy products be acceptable in flavor at least four

days after the pull date placed on the container by the processor. By means of careful temperature controls, frequent milk tasting seminars, and a shelf-life split sample program, a high degree of proficiency and uniformity has been reached in milk flavor evaluations by laboratory personnel. A chemist has been assigned the fulltime responsibility of a laboratory evaluation officer, whose primary duty is to promote uniformity and accuracy in the six division laboratories. He conducts split sample programs in cooperation with the United States Public Health Service. He also has the responsibility for carrying out a testing and licensing program for butterfat testers. Under this program, 209 butterfat testers have been licensed.

A program for close supervision of milk hauler services and milk transport cleaning facilities was initiated during the fiscal year 1974-75. This program continues to be an important one and during 1975-76 has licensed 16 hauling services, 176 milk haulers and performed 276 inspections. This program assures the maintenance of high quality milk from the farm to the plant.

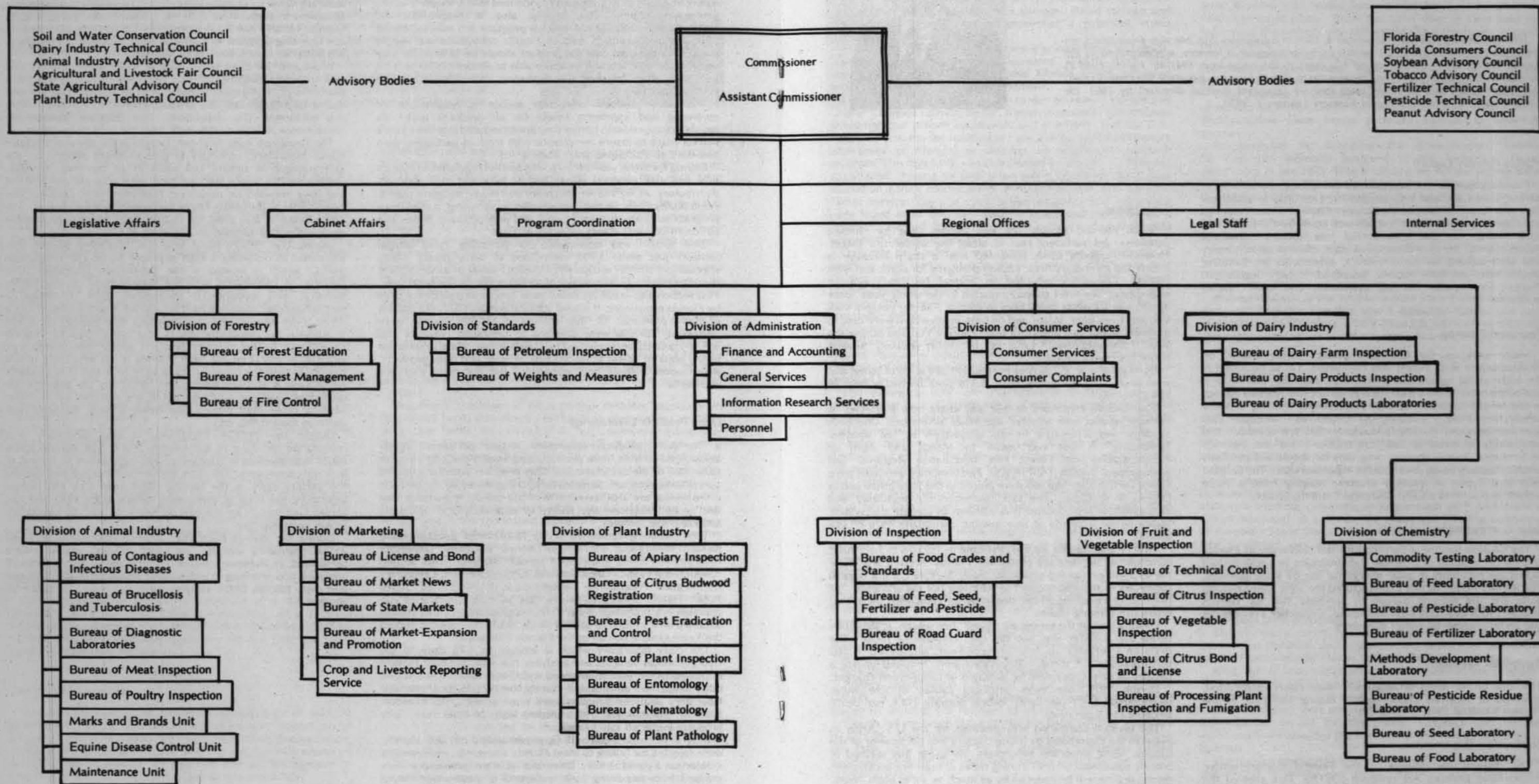
The Technicon Auto-Analyzer, located in the division's Winter Haven laboratory, continues to give excellent service for the determination of somatic cell count in all raw milk samples. Determinations by the machine have been accurate and uniform and have resulted in significant laboratory time savings. The same is true of the Milko-Tester for determining fat content. The Milko-Tester is also used for testing Dairy Herd Improvement Association milk samples for the state of Florida.

During the 1975-76 fiscal year the laboratory section was successful in obtaining a high pressure liquid Chromatograph (HPLC) which is located in the Tallahassee laboratory. Our chemists in cooperation with the manufacturer of this highly technical and complicated instrument have developed a methodology for analyzing milk for vitamin A and D content. As a result of the development of satisfactory methodology for A and D analysis the chromatograph is now being used for routine surveillance testing of dairy products which show addition of vitamins A and D on the label. Florida is the first state in the country to have the capability to analyze milk and milk products for vitamin A and D content. The HPLC has the potential for determining all the nutrients which are required by nutrition labeling other than protein and heavy metals. Research will continue toward this end.

During the 1975-76 fiscal year a new laboratory was constructed on I-75 at an approximate cost of \$59,000 which is a major improvement in appearance and capabilities in testing of bulk milk transports. The dairy division will occupy and operate this facility early in the coming fiscal year. Our old mobile laboratory has been in continuous service since 1940 and has served well on I-75 for the past six years, as has the temporary tanker sampling bay.

During the 1975-76 fiscal year, division laboratories received 21,705 regulatory samples, on which 151,340 analyses were performed; an increase in output of 29.5% per worker in terms of analyses, and resulting in a significant reduction of 20.3% in per unit cost. 108,956 DHIA samples were also tested for butterfat content.







# DIVISION OF FORESTRY

*John M. Bethea was born November 4, 1919 in Sanderson, Fla. He was graduated from the University of Florida in 1941 with a bachelor's degree in forestry, was employed by the Florida Forest Service, then served five years in the Army from 1941-46. He returned to forestry as extension ranger, and progressed to district forester, assistant fire control chief, fire control chief and associate state forester (assistant division director) by 1963. He became director of the Division of Forestry January 1, 1970.*



## Florida Forestry Council

Commissioner Conner reappointed council members Philip J. Moses, Lake City, and P.C. Crapps III, Live Oak, to additional four-year terms on the Florida Forestry Council. Three meetings were held during the year. Action was taken by the council on such matters as the controversial tree species *Melaleuca quinquinervia*, the new disease-resistant coconut palm nursery and seed orchard for south Florida, procedures for handling timber sales on state forests, proposed forestry legislation, charges for standby burning assistance, and other related problems.

## Personnel Training

Major work on the Central Training Facility located on Withlacoochee State Forest was completed. Yet to be added is the audio-visual equipment, which, when installed, will make it one of the most modern training facilities of any forestry agency in the United States. A change in personnel training was the conversion to the "Training by Objectives" concept. This approach provides training procedures that are objective and measurable in terms of both the trainee's and the trainer's performance. Special training programs for specialized positions are continuously being developed or expanded upon. The division held nine types of training courses, ranging from a radio technicians clinic to a CFM Technical Training School.

## Solar Energy Project

The division became a partner with the University of Florida and the Department of Offender Rehabilitation in a pilot project to test the feasibility of solar energy for use by state agencies. The Raiford Prison facility manufactured the solar water heating units and the division agreed to purchase five for various locations such as a recreation bathhouse, dispatcher's residences and an environmental center dormitory.

## Equipment Redesign

A total of 247 items of equipment were either constructed, modified or received major repairs during the year at the division's central shop in Lake City.

## Employment Opportunities

The division participated in the Federal Comprehensive Employment Training Act program (CETA). This allowed the division to employ over 200 unemployed persons. CETA enabled the division to expand fire capabilities and provided a strong labor force on the nurseries and state forests.

## Fire Control

South Florida, usually the key trouble area for wildfire problems, got sufficient rain to offset the winter fire threat. However, zapping frosts combined with a sharp increase in debris and incendiary fires, caused problems for north and west Florida. Conditions returned to normal for that area by mid-spring. The most serious situation in the whole state, once again, was a rash of muck fires in central Florida, notably Polk County. Even here, losses and division involvement were held to a minimum due to a muck-fire team concept initiated during the year. Total suppression time was noticeably reduced. Several major fires were avoided.

During the year, 8,758 fires burned 149,284 acres of forest and wild lands. The preceding year, 8,118 fires burned a total of 284,275 acres.

The division continued to test and effect new strategies to increase control over weather and other adversities. One such strategy was a venture in the automation of fire weather forecasting. A test was made in March and April of Administrative and Forest Fire Information Retrieval and Management System (AFFIRMS). Two computer terminals were leased for this test. The two were placed in the state office and in District 9 at Ocala. The test confirmed the feasibility and desirability of the concept. It is planned to operate the system statewide for a period of four months during the 1976-77 fire season.

Title IV was funded for the first time in 1975-76 to help rural communities improve fire protection. Florida received \$76,780 of the \$3.5 million funded nationally. Also, the Fire Control Bureau continued its training support to volunteer fire departments. 787 firemen, representing 81 fire departments, completed the 8-hour brush fire training course.

Looking back at the seemingly "light" fire season, it should be noted that weather was not the only responsible factor. The division's efforts in law enforcement numbered 6,565 investigations. Of these, 336 persons were required to pay a penalty by arrest, payment for damages or suppression charges.

During 1975, the three principal causes of fire were: incendiarism (29.7 per cent), debris burning (18.6 per cent), smoking (14.5 per cent).

The division completed arrangements for the U.S. Army to assist in the Everglades by lifting tractors into the interior of the Glades, using sky-crane helicopters. By using this method of putting equipment on fires during times of high fire occurrence, response time will be reduced by as much as six to eight hours.

Safety continued to be a division-wide emphasis. However, the division discontinued the Safe Driver Award due to shortage of funds.

## Forest Management

During 1975-76, land management assists to landowners, primary wood-users and municipalities totaled 15,513. There were 219 requests on 186,572 acres that were referred to private consulting foresters.

Helping landowners and homeowners with insect and disease problems assumed primary importance as the state experienced a year of freak storm and pestilence damage. Rapid salvage and the onset of winter weather prevented a potential insect epidemic after Hurricane Eloise.

The annual insect detection survey was completed in August. Losses over the whole state decreased slightly from 1974 although northeast and northcentral Florida losses increased because of prolonged drought conditions.

Epidemic conditions of the pitch canker disease in Volusia and Flagler Counties caused, by far, the most concern. The division called together private landowners and scientists from the U.S. Forest Service and the Institute of Food and Agricultural Sciences (University of Florida) to develop an emergency research program. This task force was coordinated by the Florida Forestry Association. Among its first steps was a statewide slash pine plantation survey conducted by division foresters and the U.S. Forest Service. Signs of pitch canker mortality and infestation were found in all counties. Growth losses and mortality were highest in planted stands. Counties in central and south Florida were most heavily infested.

Only one pest outbreak was noted. This was an epidemic of southern pine beetle (*Dendroctonus frontalis*) which was first sighted on Eglin Air Force Base in November, 1974. Salvage procedures were started and by this past winter, the 1,500 acre epidemic (the largest southern pine beetle outbreak in Florida) was under control.

In cooperation with the Extension Services, training materials and plans were developed for the Environmental Protection Agency requiring pesticide licensing laws. All private and commercial applicators of restricted pesticides are required to be certified by October, 1977.

The statewide land use classification mapping job was completed in June. Division input is making computerized data available for developing future land use plans and assessing environmental impacts on existing forested areas in Florida.

Under Section 208 of Public Law 92-500, Water Quality Amendment of 1972, the division became an active participant in the process of water quality management planning. This fiscal year, selected Division and Forestry Industry personnel received training in the evaluation of suspended sediments of forest lands as a first step toward inventorying nonpoint pollution from managed forest lands.

The GFA Improved Harvesting Project moved forward. Its purpose is to reduce logging wastes at the scene of logging. Volume of wood yield increased 32 million cubic feet using the improved harvesting recommendations.

The division's Sawmill Improvement Program logged in its 42nd mill improvement study. A computer system for a complete economic study of hardwood and cypress sawmills was developed.

"Hell Hole Logger," a 15-minute color film depicting a swamp sled-cable harvesting system is being produced by the division. The workprint has been in such demand by forest industry and others that completion has been delayed.

Energy conservation continued to be a division research priority. A study was made to show mill owners how to save money by utilizing mill residues as a fuel source.

Florida led the South in the planting of bare root tree seedlings in 1975-76. Approximately 48 million bare root trees planted in the state were furnished by the division's nurseries. Potted seedlings sales for the year were down, reflecting the overall economic trend.

Containerized eucalyptus seedlings were again grown for planting by the Eucalyptus Co-op. The season's major innovation was the use of pelletized seeds. A total of 632,400 seedlings were

produced. Production was curtailed by disease problems, but the expectation is to produce about one million eucalyptus seedlings next year.

Work continued on the relocation of Herren Nursery to its new site in Highlands County. Likewise, negotiations were initiated and steps taken to establish the Miami nursery as provided by the 1975-76 Legislature. 10,000 coconut palms had been potted as of June 30 using land leased from the USDA Plant Introduction Station in south Miami. Work has been done to clear land for expanding the nursery site and establishing the future coconut palm orchard.

The Division's four public-use forests moved closer toward a coordinated environmental education program while giving attention to recreation, timber and wildlife priorities.

Total revenue, including recreation and timber receipts, amounted to \$1,402,291.07 for Blackwater River State Forest. Withlacoochee State Forest recorded \$503,281.46 from all sources.

Responsibility for operating the Environmental Center facilities was officially assigned to the individual forest supervisors in late 1975. Title X funding on Withlacoochee State Forest helped expedite construction of the Environmental Center dormitories, cafeteria and multipurpose teaching pavilion. This will mean an environmental education center that is close to Florida's population center where there is much demand and need.

Use of the already-existing Blackwater River Environmental Center increased greatly. A total of 1,003 students, adults and teachers utilized the facilities for environmental studies as compared to 339 the previous year.

Recreational use of the Withlacoochee State Forest more than recovered from the previous year's economic slump. Day use climbed from 56,000 visits in 1974-75 to 238,000 visits in 1975-76. Overnight camping use of non-pay campsites more than doubled.

## Forest Education

To this year's public program was added a Bicentennial theme. A series of tree planting events spotlighted the country's dependence on the forest resource, past, present and future. Forest education staff, as well as district office personnel, got into the act to help different organizations make their tree planting programs a success.

Notable examples were the Mt. Vernon Oak planting ceremony on the state capitol grounds in cooperation with the Florida Federation of Women's Clubs, the "1776 Trees for Florida" statewide planting ceremony in cooperation with McDonald's Corporation, and, as a climax, the moon tree planting ceremony at Kennedy Space Center, Cape Canaveral, Florida. The moon tree ceremony was presided over by former Astronaut Ed Mitchell.

The Mt. Vernon Oak planting laid the groundwork for the "Pennies for People" program that will continue into 1977. Its desire is to establish nature trails, outdoor classrooms, play and recreation areas, bike paths and other appropriate outdoor uses on suitable state properties.

The division's forest education staff continued to provide educational materials and resources and newspaper promotion for the Environmental Center summer workshop activities.

Also, the division continued an active publications program. Six issues of the *Division of Forestry News* and four issues of the *Florida Forestry Reporter* were printed.

Shelf brochures were updated and reprinted as needed as an informational service for the public. Graphics and editing assistance were provided the fire control and forest management bureaus.

The division produced a total of 35 biweekly feature articles for distribution to county and urban foresters. The series topics ranged from a notice to landowners about a faster way of reporting a rural fire to advice on heating with firewood. A special effort was made to balance urban and rural forestry

subjects. Use of the biweekly forestry series is showing a marked increase.

Almost 220 students attended the 41st annual Forestry Training Camp, which was held July 13-25, 1975 at O'Leno State Park near High Springs. Awards luncheon speakers were P.C. Crapps III, Forestry Advisory Council member and Reg Ivory of the Florida Forestry Association.

Forestry field days involved about 100 teams and almost 1,000 youngsters in six area contests. South Sumter chapter placed first in the statewide championship at Perry, October 10th.

The FFA Forestry awards were sponsored by industry during the year. One was an individual member project sponsored by Seaboard Coast Line. Bryan Mobley of the Baker County Chapter was 1975-76 winner.

Winner of the St. Regis Chapter School Forestry Award was the Gainesville Agribusiness FFA Chapter.

Ten public school libraries, 19 public libraries and two other organizations operated Smokey Bear reading clubs in the summer of '76. Over 5,000 children enthusiastically participated.

The division sponsored 317 exhibits which were viewed by an estimated 2.4 million people. It seems to be a growing trend for local district offices to design their own exhibits tailored to their own publics.

There were 3,500 showings of films from the division's film library to school classes, civic groups, clubs and churches.

In cooperation with the U.S. Forest Service, the bureau distributed 141,000 items of literature relating the benefits of the forest and conservation. Some 10,563 fire prevention and environmental message posters were given out, illustrating the ongoing popularity of Smokey the Bear, Woodsy Owl and the public interest in forests.







## DIVISION OF FRUIT AND VEGETABLE INSPECTION

*Herb M. Riley was born April 5, 1904 in Butler, Georgia. He was graduated from Gordon College in 1923 and employed by the Federal-State Inspection Service of the department in 1927. He remained in that capacity until July 1, 1939, when he received Federal Civil Service appointment. He became supervisor of Florida in charge of inspection of fruits, vegetables, and nuts for grade, quality, and condition under a cooperative agreement between the United States Department of Agriculture and the department. Mr. Riley was appointed director of the division November 1, 1963.*

The Division of Fruit and Vegetable Inspection is responsible for the inspection of all citrus, both fresh and processed, in accordance with the Florida Department of Citrus, and regulations of Federal Marketing Committees. The division is also responsible for such inspection of fruits, vegetables, melons, nuts, and grain as may be requested, or as may be required under marketing agreements and price support programs.

Inspection of fresh fruit and vegetables is performed by inspectors through cooperative agreements between the Florida Department of Agriculture and Consumer Services and the United States Department of Agriculture. Processed foods inspection is handled through contractual arrangements between the Commissioner of Agriculture and the United States Department of Agriculture.

In addition to inspecting fruits, vegetables, nuts, and grain, this division is also responsible for the fumigation of all grapefruit shipped to Japan.

Detailed reports of this division's activities for the 1975-76 fiscal year will be found in its annual report, issued from Winter Haven. This particular report will summarize the highlights only.

### Bureau of Citrus Inspection

Inspection and certification of all citrus fruit shipped in fresh form, both interstate and intrastate, is the primary responsibility of the citrus bureau. Volume shipping normally extends from early fall through late spring, with light movement through the summer months. Approximately 15% of the total citrus production is marketed through fresh fruit channels. More than 75 million "4/5 bushel" boxes of fruit were processed and shipped through approximately 140 fresh citrus packinghouses during the 1975-76 season. The inspection procedure involves testing for maturity under state law, running samples for grade and size on the basis of U.S. Grade Standards (as regulated by the Growers Administrative and Shippers Advisory Committees operating under Federal Marketing Orders), and enforcing numerous rules and regulations of the Florida Department of Citrus.

In actual operation, inspectors are assigned to packinghouses on the basis of need, and will vary from a low of 8-10 to over 200 during the peak of the shipping season. While in the state, fresh fruit inspectors are integrated with the processed citrus and vegetable inspection programs in order to make the most efficient use of available manpower, and are rotated to out-of-state inspection assignments during the spring and summer months.

Greater uniformity of inspection and grade interpretation continues to be a major goal of the bureau. This is being accomplished through an intensive training program (both formal

and on-the-job), and by close daily supervision in each district of the state.

In cooperation with Department of Citrus Rule 20-44, the bureau makes routine spot inspections of all citrus roadside stands and gift fruit shipments. During the 1975-76 season more than 35,500 inspections of gift fruit and roadside citrus sales were made. Violations were turned over to the Bureau of License and Bond for follow-up investigation, hearings, or other legal action.

Administrative responsibilities of the bureau include coordination of field supervision, rendering technical reports and written instructions to all inspection personnel, including changes in laws, regulations, grade standards and inspection procedures, attending industry meetings, thereby establishing and maintaining a cooperative and effective working relationship with the industry and the public, as well as general supervision of office staff, field supervisors, and inspectors.

The bureau also maintains close cooperation with this division's statistical, personnel, and fiscal sections, whose major responsibilities are listed as follows:

1. The fiscal section handles all financial activities of the citrus bureau. Preparation of payrolls, auditing of expense vouchers, purchasing and issuing of supplies to all field personnel were some of the larger activities handled. In addition, the final preparation of the legislative budget and preparation of fee reports for industry fee committees are responsibilities of the fiscal office.

2. The statistical section audited 69,647 fresh and 10,804 cannery certificates, and 454,643 cannery memorandums for billing and statistical purposes for the bureau during 1975-76.

A most comprehensive auditing is always executed to obtain a correct billing for each shipper or processor, and a close check is made of fresh certificates to see that the grade and sizes meet current Growers Administrative Committee regulations and the Florida Citrus Commission rules.

In addition, some of the other forms audited, coded, or checked by this section included packinghouse manifests, manifest certificates, inspection preliminary note sheets, canner's report of fresh fruit receipts, fruit destruction and regrade forms, plant board scale certificates, and USDA daily inspection reports.

During the past season, the statistical section issued daily, weekly, monthly, and annual statistical reports on movement of Florida citrus, in addition to reports on export fruit, diverted fruit, fruit destroyed, and fruit shipped out under containers by special Florida Department of Citrus permits. The following utilization table shows the tremendous tonnage of citrus fruit involved in these reports during this past season, with detailed information available from the Winter Haven office.

**Certified Fresh Fruit Shipments -  
Standard 4/5 Bushel Box Equivalent**

	1975-76 Season	1974-75 Season
Grapefruit	38,781,219	35,367,475
Oranges	29,933,782	30,436,578
Tangerines	7,043,195	6,058,812
<b>Total</b>	<b>75,758,196</b>	<b>71,862,865</b>

**Cannery Commercial — 1-3/5 Bushel Box Equivalent**

	1975-76 Season	1974-75 Season
Grapefruit	28,724,501	25,884,169
Oranges	175,932,387	165,783,337
Tangerines	1,766,919	1,524,093
Other Fruit	981,839	1,136,628
<b>Total</b>	<b>207,405,646</b>	<b>194,328,227</b>

3. The personnel section reports they are hiring fewer inspectors due to the economic situation, but this situation has enabled them to hire better qualified people to fill the positions due to the many applicants applying.

The transitory nature of the inspection service is still causing them to lose good inspectors. However, by maintaining close contact with USDA and with the cooperation of the other states' personnel officers, all personnel needs were met.

The training office is constantly upgrading their inspectors training program for both new and returning inspectors. This training usually takes place before their field assignments begin in the fall. The training is given the inspectors on an individual basis as well as group instruction, at the Winter Haven office and other selected field points.

**Bureau of Citrus License and Bond**

This bureau is concerned with those sections of the Florida Citrus Code pertaining to citrus fruit dealer's bond requirements, issuance of citrus fruit dealer's licenses, citrus fruit dealer's agent registrations, packing house and cannery registrations and field box mark or brand certificates. A complete listing of all citrus fruit dealers and their agents is compiled several times each season.

Administrative responsibilities include extensive field work in the investigation of purchases or sales of citrus fruit in all forms. Complaints involving citrus fruit are filed with the Commissioner of Agriculture and handled as provided for in the Citrus Code and other applicable statutes.

The appropriate order, based on sworn testimony, is entered in the matter by the commissioner with provision for suspension of license for failing to comply.

All interested parties are served with the Order and the file is closed upon compliance.

**Bureau of Technical Control**

The Bureau of Technical Control furnished technical services to the division and to the industry through extensive administrative, laboratory and field duties.

Administrative responsibilities included coordination of fresh fruit testing at processing plants with the finished product inspection, technical consulting services to the industry, auditing and verification of yield data at processing plants, and the furnishing of comprehensive tabulated weekly data on the internal quality of all fruit received at processing plants.

Laboratory duties included analysis, approval and licensing of fruit treatment materials, preparation and issuance of field equipment and chemicals for maturity testing and internal quality, enforcement of the arsenic spray program, and the monitoring of pesticide residues on citrus fruits and in citrus products. For the second consecutive season, major efforts went into the analysis of fresh fruit samples for fungicide content,

**Citrus Bond and License Report**

Total amount of citrus fruit dealer's bonds	\$16,546,000.00
Total amount of registered shippers and/or cannery inspection fee guarantee bonds	828,050.00
Total amount of surety bonds posted by dealers advertising as "Bonded Shipper" in accordance with Chapter 57-4, Laws of Florida	157,000.00
Certificates as provided by Department of Citrus, Rule 20-43-43.04, issued on request to dealers posting performance bonds	147
Licenses issued to "Bond Exempt Dealers"	193
All citrus fruit dealers licenses issued	1589
Manufacturer's licenses issued	15
Citrus packinghouses registered	197
Canning and/or concentrate plants registered	55
Registered agents of citrus fruit dealers	820
Complaints disposed of	121
Complaints pending	57
Complaints dismissed	12
Amounts paid to claimants by dealers	13,121.35
Amounts paid to claimants by sureties	221,825.64
Revocation of License proceedings	2
Administrative Hearings — Prehearing Conferences	32
Formal Hearings held	21
Fines imposed by Commissioner of Agriculture	20,000.00
Licenses suspended by Commissioner of Agriculture	6
Licenses cancelled by Commissioner of Agriculture	19



involving more than 1,000 separate determinations. The monitoring of export shipments of fumigated grapefruit for ethylene dibromide residues and other additives likewise increased, with laboratory facilities and personnel stretched to a critical point.

Field responsibilities during the past season were primarily in the areas of maintenance of specialized equipment, and automation of testing procedures and equipment, as follows:

1. The routine but heavy schedule of servicing and maintenance required a continuing effort in the setting, maintaining and servicing 106 AMC Model 2700 single-head extractors in the testrooms of packinghouses; and a similar but more extensive program in the testrooms of processing plants in which 60 FMC Model 091B extractors were constantly checked for uniformity of operation by means of a truck-mounted extractor control unit. For this purpose, a new heavy-duty truck was placed in service this past season, and with no additional personnel, coverage of the processing plants was much more extensive.

2. The mechanization and automation program to increase the accuracy and effectiveness of load evaluation inspection at processing plants, which went into the pilot-testing phase at five plants this season, required a tremendous amount of technical supervision. Each of the testrooms at those plants was equipped with identical systems for electronic weighings for juice content, titration for acidity, determination of degrees Brix, with computerized calculations and printing of inspection certificates. The equipment met acceptance specifications, but because of technical difficulties, the systems could not be operated without back-up facilities. Certain minor modifications and adjustments have been incorporated in each system, and after verification testing, these units will be the official systems at the five plants this fall. It is anticipated that the expansion program to include all processing plants will follow.

#### Bureau of Processing Plant Inspection and Fumigation

The Bureau of Processing Plant Inspection and Fumigation has the responsibility for the inspection and certification of all fresh citrus for processing, and the fumigation and certification of all citrus for export to Japan. This past season more than 5,000 trailer loads of citrus were fumigated in the two fumigation stations located in Winter Haven and Ft. Pierce for a total of 5,600,000 4/5 bushel cartons. This was an increase of approximately 500,000 over the previous season and indications are for a further increase for the coming year. Fumigation is carried out over a 24 hour period using twenty trained department personnel during the peak periods.

Approximately 85% of all citrus is inspected and certified by trained field personnel at processing plants state wide. This inspection is made initially for condition to prevent the processing of unwholesome or decayed fruit, and then for maturity and internal quality. The internal quality analysis is used by processors for blending purposes as well as for determining the value of the load to the grower. This past season some 454,000 load evaluations were made by trained personnel under this bureau. This bureau works closely with the Bureau of Technical Control to assure that the equipment used in the extraction and testing process as well as the sampling system is maintained in a satisfactory condition to assure accuracy as well as uniformity.

#### Cannery Commercial (1-3/5 bushel-box equivalent)

	1975-76	1974-75
Grapefruit .....	28,724,501	25,884,169
Oranges .....	175,932,387	165,783,337
Tangerines .....	1,766,919	1,524,093
Other Fruit .....	981,839	1,136,628
	207,405,646	194,328,227

An additional responsibility of this bureau is monitoring the staffing of all fresh fruit packing houses and processing plants state wide. Staffing is based on man hours per box at packing houses and man hours per load at processing plants. Weekly tabulations are made for each packing house and processing plant showing the order of effectiveness. An annual report listing each packing house and processing plant in order of effectiveness is given to appropriate personnel for each packing house or processing plant. A substantial reduction in personnel has been accomplished over a two year period.

#### Bureau of Vegetable Inspection

The Bureau of Vegetable Inspection inspects and certifies some 30 different commodities.

Under regulations promulgated by the Florida Tomato Committee, the bureau inspects for grade, size and specified container weights. By implementation of the maximum net weight regulation, the bureau has saved Florida tomato growers thousands of dollars.

Much of the vegetable inspection does not lend itself to mechanization but in some areas, particularly peanuts, the human element has been greatly reduced by mechanical samplers, dividers, pre-sizers, screens, shellers and splitters, all developed by the bureau in a continuing effort to improve and update the inspection program.

Through cooperation of the vegetable bureau and the U.S.D.A. Agricultural Marketing Service, inspection and certification of incoming fruits and vegetables from other producing areas for quality and condition under appropriate U.S. Grade Standards are conducted as requested at major Florida terminal markets. Such inspection and certification is voluntary and is available only upon request of financially interested parties and upon payment of a fee.

The grain inspection has increased from one to three inspection labs located at Tampa, Live Oak and Graceville and further expansion is expected.

The principal products inspected were as follows:

	Packages	Equiv. Carlots
Tomatoes	26,721,865	21,744
Corn	918,961	1,220
Celery	1,187,459	1,737
Potatoes	2,077,129	4,204
Cabbage	745,521	1,174
Limes	865,566	1,323
Avocados	1,128,577	1,723
Peanuts:		
Farmers' Stock	76,582	Tons
Shelled Stock	156,306,704	Pounds
In-Shell	6,988,150	Pounds



# DIVISION OF INSPECTION



Vincent Giglio joined the department as an inspector in 1953, and after promotions to inspection supervisor and assistant director, was appointed director of the division October 1, 1967. Born in Tampa on February 7, 1925, he was educated in the state public school system and received a degree in horticulture in 1949 from the University of Florida after serving in the U.S. Air Force from 1943-45. He has remained active in the Air Force Reserve and currently holds the rank of Colonel.

The objective and charge of the Division of Inspection is the administration and enforcement of the feed, fertilizer, pesticide, seed, certified seed, food and poultry and egg chapters of the Florida statutes. In addition to the full administrative and enforcement responsibility of these seven chapters, the division lends vital supportive functions to the enforcement programs of the citrus, fruit and vegetable, milk, livestock, plant industry, and weights and measures chapters of the Florida statutes.

Administratively the division is structured into three bureaus under the direction of an administrative section. Each bureau is directly related to the enforcement of specific laws and is staffed by competent inspectors trained as specialists in a given area of enforcement. Each inspector joining the department, many of whom possess college degrees in related agricultural areas, receives an initial training regime prior to working independently. The specialization of the inspectors continues through participation in an ongoing training program, including individual instruction by supervisors, group conferences, seminars and workshops, conducted both internally and in conjunction with federal agencies. Of the 364 employees of the division, 72% are field inspectors strategically located throughout the state, thereby effectively and efficiently carrying out the charge of the division.

Consumers of the products and services regulated by the division are afforded protection by the statutory authority given to the division's inspectors to enter and inspect the premises, secure samples of products, stop-sale and destroy violative products, levy penalties and fines and seek injunctive or other court action.

The funding of the regulatory programs of this division is largely through fees. Only food inspection, which directly serves each citizen of the state, and road guard inspection, which supports the regulation activities of several departments of state government, are supported in part by general revenue funds.

Approximately 80% of the division's total budget for 1975-76 was expended in salaries. The remaining 20% was distributed for expenses, operating capital outlay, and data processing.

The division's activities, as in past years, continue to expand to encompass areas of concern of the people of the state. Most recent was the addition of a restrictive pesticide applicator's licensing program. In addition to the programs associated with Florida statutes, the division has entered into contracts with the federal government in the areas of poultry and egg inspection; medicated feed mill inspections; and food plant inspections.

The economic conditions of the past two years have necessitated the practice of frugality throughout the division. The division's management was realigned to meet these demands and the net result was the continuation of services at nearly the same level as in the past. As the economic conditions improve, parallelism between personnel and services will be reestablished with a commensurate increase in the division's services.

## Bureau of Food Grades and Standards

The objective of this bureau's activities is dual in purpose. Foremost is protection of the public against food-borne health hazards, and collaterally, prevention of economic loss to the consumer through intentional or inadvertent merchandising deceit. Enforcement of the food law has been a continuous function of this department for some 70 years.

General activities include inspection of product and facilities at the producer, processor, distributor, retailer level, i.e., wherever food products are manufactured, processed, held or offered for sale. In addition, the past several years have brought a dramatic increase in the number of consumer complaints regarding food; over 1,200 of these were investigated during 1975-76.

Inspectional facets include ascertaining suitability and sanitation of buildings, grounds, facilities, operations, processes, storage and transportation, and personnel. Methods include organoleptic, on-site chemical and physical testing, weighing and measuring, collecting samples for laboratory analyses, and others. Available regulatory enforcement tools include stop sales, stop use, destruction, hearings, revocation of permits, administrative fines, injunctions or other court action.

During the fiscal year the contract with the Federal Food and Drug Administration was continued for the third successive year. This joint state/federal effort in consumer protection provides superior results in sanitation inspection of food plants in Florida.

The Federal-State Poultry and Egg Grading Agreement with the United States Department of Agriculture was also contained. Under this program all USDA grading is done by the Florida Department of Agriculture and Consumer Services. An independent state grading surveillance program is also conducted and in combination the two programs provide excellent quality assurance to the consumer.

Over 71,000 inspections were made this year; however, considerably more time was spent on food plant inspections. In conjunction with these inspections, in excess of 10,000 samples were collected, 2,600 stop sale orders issued, 448,000 packages weighed, 4 million pounds of unfit food destroyed, 155 million dozens of eggs and 253 million pounds of poultry inspected.

## Bureau of Feed, Seed, Fertilizer and Pesticides

The Feed, Seed, Fertilizer and Pesticide Bureau, charged with the enforcement and regulatory activities under the applicable statutes, conducts inspections and collects samples of the commodities listed in the bureau's title. Inspections are conducted at levels of manufacture, distribution, sale and consumption. In addition to inspections and sampling, the enforcement program includes product registration and maintenance of registration

files, issuance of licenses and permits, labeling reviews, assessment of appropriate penalties, responding to consumer requests and other similar related matters. Approximately 40 field inspectors collect samples for analytical examinations, check net weight, issue stop sale and/or destruction orders on violative products, conduct field tests on sodium hypochlorite, and examine grains for the presence of aflatoxin. Each of these activities is related to maintaining the quality of the product's use by the consumer.

The feed section initiated several changes during the year which will be of benefit to the Florida consumer. Procedures were changed in processing penalty payments in regard to analytical deficiencies, unlabeled lots and short weight. This will benefit the consumer by "speeding up" the payments of penalty assessments.

The feed law was amended, effective October 1, 1975, to provide that feeds manufactured for wild birds and aviary birds would have to comply with the requirements of chapter 580. This resulted in 45 companies registering these products for the first time. There are now 704 firms registered to distribute commercial feed in Florida. The total tonnage reported during 1975-76 exceeded 2,293,932 tons.

Approximately 14,000 feed labels are on file for products currently distributed in Florida. Some 100 labels are reviewed each week for registration purposes. Labels accompanying feed sample collection reports are also reviewed.

The field inspectors collected 7,167 feed samples this fiscal year. Approximately 21% of these were mislabeled or deficient and therefore not legal. Seventy-two medicated feed mill inspections were performed under a contract with the U.S. Food & Drug Administration; some 51 feed samples were collected during these inspections.

There were 602 lots of grain sampled and graded by the field inspectional force under a cooperative agreement with the United States Department of Agriculture. Fifty-one samples of feed were checked by the field inspectors for aflatoxin.

The quality of seed sold for planting purposes is of vital importance to agriculture and the inspection program relating to seed reflects this importance. During the period covered by this report, there were 6,057 samples of seed collected representing 27,547,269 pounds. Reported illegal or mislabeled were 925 samples representing 895,900 pounds. Other samples reported were commercial or for special information. A total of 15,767 pounds of seed were destroyed as unfit for planting purposes. Licenses to sell seed in Florida were issued to 1,996 dealers. Inspectors made 10,797 dealer inspections and conducted 2,559 consumer or farmer inspections.

The fertilizer program continued to increase in its activities in 1975-76. There were 9,282 samples collected from approximately 394 fertilizer companies. The number of requests from consumers for sampling of their fertilizer increased considerably this year. Most requests were handled expediently even though there was decrease in the number of inspectors as a result of the economic decline. The penalty assessments of \$553,757 for the year were down considerably from the previous year. An increase in the registration of small package fertilizer for household plants and home gardens reflected the upsurge of growth of fertilizer sales for this type product. There are approximately 70,000 different fertilizer brands registered with the state, most of which are formulations mixed at customer's request to meet land needs or crop requirements. This past year some 10,000 new brands were registered.

Legislation was passed this year amending the Florida fertilizer law to provide for more labeling uniformity, clarity and additional requirements which will provide the consumer more information on the meaning of the term "organic" when it is used in the fertilizer brand name. Provision was made for a \$10 penalty assessment for fertilizer sold without proper labeling.

The feed and pesticide section was separated into two operational units during the year. This was possible because of the hiring of an administrator to handle pesticide applicator requirements.

The pesticide section registered 10,043 pesticides from 1,213 companies during the calendar year of 1975. Field inspectors collected 7,176 pesticide samples across the state. Of these, 430 were deficient in that they failed to meet label guarantees.

A state plan for certification to register pesticides to satisfy state special local needs was prepared and approved by the U.S. Environmental Protection Agency. This is the only means available for the state to register pesticides to satisfy the unique requirements of Florida without first obtaining Federal registration.

The certified application licensing requirement was extended for a year when the 1976 Legislature amended the statute to correspond with the federal deadline of October, 1977. New Rules — Chapter 5E-9; pesticide applicators — were developed and approved for the Florida Administrative Code.

The pesticide section cooperated with the Environmental Protection Agency primarily through the Region IV office in Atlanta by investigating pesticide accidents/incidents and providing timely pesticide episode reports.

There were 933 licenses and 11,178 permits active during the year to sell, purchase and use restricted pesticides. During the coming year, the status of many of these permits will change as applicators are licensed to use restricted pesticides.

Bureau inspectors conducted a total of 30,961 dealer and 12,941 consumer calls during the year. This resulted in the collection of 29,682 samples for laboratory examination. There were 1,651 stop sale orders issued on violative products and 129 destruction reports. A total of 102,701 packages of feed, seed, fertilizer and pesticide were weighed to determine that consumers received correct net weight as declared on the labels. The quality control activities of the bureau have again been effective in providing consumers of the state with quality products.

#### Bureau of Road Guard

1975 was the 41st year of existence of this program and brought about some major changes for the bureau. Among these was an amended law designating the passing of a road guard station by a truck or other vehicle subject to inspection as a misdemeanor. It further provided for the appointment of special officers with specific authority for arrest and bearing firearms. Since enactment of the amended law, a number of employees have completed the requisite police standards training course and qualified as special officers.

The inspection stations at Branford and Ellaville have been completely renovated. These aged facilities are now in modern up-to-date condition.

Both male and female inspectors have now been outfitted in new uniforms, adding to their pride and professionalism.

Each patrol car is now equipped with two-way radio communication. With five base stations, a complete radio network now serves the bureau.

Support activities provide enhancement for various enforcement programs of other state and federal agencies. For example, during the year cooperation with the Florida Department of Revenue through our network of stations resulted in about \$25,000 revenue collected. Further audit resulting from our 1500 reports will likely result in a substantial additional sum of money collected by the state.

Supervisory personnel have participated in staff programming activities and the development of an updated administrative and operational policy manual. The completed manual will include policies and procedures, code of conduct, and various other facets, providing more comprehensive and uniform operations.



# DIVISION OF MARKETING

*John D. Stiles served in the U.S. Marine Corps during World War II for three years and was employed as director, division of marketing for the West Virginia Department of Agriculture before joining the Florida Department of Agriculture in March 1962 as chief of the state marketing bureau section of the division of marketing. He became assistant director in 1964 and director in 1966. Born in West Virginia September 5, 1924; he was graduated from the public schools there and received a bachelor's degree in agriculture from West Virginia University in 1950.*



## Administrative Section

Major areas of activities and accomplishments of the administrative section cover a wide range of programs.

Export marketing activities received special attention during 1975-76 fiscal year. Personnel played a leading role in planning and conducting the first annual Southern United States Trade Association (SUSTA) Food and Agricultural Trade Show in New Orleans, Louisiana. Hundreds of inquiries for agricultural products from foreign buyers were handled by division personnel with many sales resulting. Also, many foreign visitors interested in buying Florida products were assisted in their efforts.

A staff member led a goodwill mission of 20 Florida agriculturalists to the Dominican Republic. This staff member also led a group of 22 Florida agribusiness people to the National Livestock and Agricultural Show in Santo Domingo, Dominican Republic.

Considerable time was spent in locating horses for export. This past year was one of the best the state has ever had in exporting registered quarter horses as well as other breeds.

A study was made of export shipments of Florida's fresh fruits and vegetables to determine current deficiencies in ocean transportation services. This was done to get some idea of future needs and opportunities.

The administrative section personnel were also active in the following major areas:

Worked with the cooperative segment of agriculture as a member of the Four States Committee and as a member of the board of directors of the Florida Council of Cooperatives.

Worked in the field of distribution assistance carrying out a container standardization project and assisted with other agencies both private and public in other vegetable marketing programs.

Worked with the United Fresh Fruit and Vegetable Association as a consultant for their palletization and productivity committee.

Administered marketing orders in three areas — peanuts, soybeans and tobacco. Assessment funds have been collected, budget recommendations developed and contracts written for the expenditure of these funds.

Maintained a close working relationship with the U.S.D.A. and growers in setting up the marketing procedures and schedule for Florida's flue-cured tobacco markets.

Carried out an active program in both domestic and export transportation to facilitate Florida agricultural shippers.

Worked with 4-H and FFA youth in the area of cattle judging and showmanship contests as well as the grading and selling of these animals.

Worked with communities around the state in developing farmers' community retail markets.

Worked extensively with the farmers in Gadsden County in finding alternate crops to replace shade tobacco.

The primary emphasis of the equine marketing program has again been the Florida-bred quarter horse registration program.

In addition to keeping the records, approximately \$25,000.00 was paid back to the industry in additional purses for Florida-bred horses and breeders incentive awards, which are paid based on the horses performance at the race track.

## Bureau of State Markets

The Bureau of State Markets' primary purpose is to assist in the marketing of agricultural products. This function is carried out by providing leadership, facilities and information necessary to transport agricultural products from the farm to the consumer in a systematic and efficient manner at a reasonable price for the producer and consumer.

Several new packing houses were added to our market system during the year. Considerable renovations and new additions were made in the effort of up-grading our facilities. Several tenants on the markets installed new equipment and machinery, improving their ability to handle more produce.

The major additions and improvements to our market facilities during 1975-76 included:

1. Packing house and loading platform at Wauchula.
2. Watermelon shed at Suwannee Valley.
3. Office wing and lunch room at Pompano.
4. Retail market at Fort Myers.
5. New office building and renovation of cooler rooms at Palatka which were partially destroyed by fire.
6. A chain link fence at the Sanford Market for security purposes.
7. New cooler rooms added to markets in Plant City, Florida City, Fort Pierce, and Palatka.
8. Extensive renovations and upgrading facilities at various markets were also accomplished. Approximately \$1,000,000 was invested in new facilities and market improvements during the year.

Growing conditions in several areas of the state were far from being ideal. In fact, even with a considerable increase in acreage in many crops, we actually experienced a decrease in yield compared with the year 1974-75. Prices received for produce during 1975-76 were somewhat better.

## COMPARISON TABLE

	1974-75	1975-76
Units (bushels) Sold		
Through State Markets	29,240,232	26,742,062
Value of Produce Sold		
Through State Markets	\$5,901,306.00	\$5,929,884.00

The continued interest in retail community markets has been responsible for adding new outlets on our markets and enlarging others that were already established.



Market advisory committees play a very important role, and all markets are encouraged to utilize these interested people since much has been accomplished through their knowledge, wisdom and guidance. Several legislators, bankers, local officials and community leaders are now serving on these committees.

The Bureau of State Markets operates under a self-supporting system which gives us all a sense of accomplishment since we are no longer a tax supported organization.

#### Bureau of Market Expansion & Promotion

Promotional activities during the past fiscal year were many and varied. Bureau personnel conducted two successful promotions for the Florida Cattlemen's Association; arranged a 4th of July lime promotion in 2,100 A & P Stores; participated in a Sub-Tropical Fruit Festival; conducted All-Florida promotions in Atlanta, Birmingham and New York; prepared an advertising campaign for Florida's quarter-horse industry; published a peanut cookbook; prepared a logo and letterhead for the Florida Peanut Association; planned pole bean promotions for Florida, Georgia, Tennessee and Alabama; helped plan and participated in the Plant City Strawberry Festival; planned a Florida Food Festival in Tampa; promoted watermelons to civic clubs and church organizations in the Eastern U.S.; presented a promotion plan to mango growers; arranged several celery promotions; and photographed tomato point-of-sale materials on display in several food stores.

During the year, bureau personnel worked with organizations such as: The Florida Nurserymen & Growers Association, Southern United States Trade Association, Florida Fruit & Vegetable Association, Produce Marketing Association, Florida International Agricultural Trade Council, Florida Restaurant Association, Convenience Foods of America, Florida Federation of Women's Clubs, Florida State Horticultural Society, Florida State Fair, Florida Meat Packers Association, Atlantic Fresh Produce Association, Division of Family Services and the American Home Economics Association.

Special projects included production of a produce training manual, a booklet on 41 city unloads, annual Agri-Tour for Miss Sunflower, an agricultural mall promotion, All-Florida promotion in New Jersey with Miss Sunflower in Pantry Pride Stores, Farm-City Week activities, compilation of a Florida food editors list, and the production and distribution of 100,000 copies of "Grandma's Recipes," a bicentennial recipe booklet. Bureau personnel also helped arrange a food editors luncheon in New York, built a division exhibit, coordinated Florida agriculture exhibits with USDA's 3rd Century Exposition, planned the Bicentennial Scroll Program, produced a harvest dates booklet, conducted Harvest Festivals in New York and Pittsburgh, produced the National Agricultural Transportation Conference booklet, conducted the Florida Chicken Cooking Contest, and became involved with in-depth food photography.

Bureau merchandising specialists appeared on 99 TV programs in Florida and answered 1,922 requests for recipes. Food columns and articles were written for newspapers and magazines, cooking contests were judged, fair exhibits were judged and a food freezing booklet produced. Recipes were kitchen-tested using Florida produced commodities.

Bureau personnel designed, developed and distributed point-of-sale materials for various Florida commodities for retail use. During the year, 145,013 P.O.S. kits were distributed in 40 states. Also, over 2,118,895 bulk pieces of material were distributed from the bureau's warehouse section.

Thirty-six news releases were disseminated and articles were written for *The Packer*, *American Best Vegetable Magazine*, *American Vegetable Growers*, *New York Journal of Commerce*, *The Florida Nurseryman*, *Florida Electric Co-Op News* and *The Market Bulletin*.

Mini-menu films were aired free 661 times and 1,881 written requests for recipes were received. Judging by recipe requests, several of the earlier films are being re-run on some stations.

Mini-menu films have been shown during major network programs.

The bureau produced and distributed monthly "Tips To The Homemaker" to radio stations in Florida as well as a monthly "Clips & Tips" on Florida foods for weekly newspapers. A bi-monthly "Feedback" newsletter was prepared, printed and mailed to the institutional food industry in the Southeast to increase institutional use of Florida fruits and vegetables.

The bureau presented programs on Florida agriculture to women's clubs and merchandising specialists conducted food demonstrations for interested groups around the state.

The bureau conducted recipe testing and dissemination, made merchandising calls in the Eastern U.S. and Canada, and developed speeches and slide presentations.

#### Bureau of Market News

During the fiscal year 1975-76 the Bureau of Market News adjusted to change operationally and financially.

Following consolidation and reorganization in the fruit and vegetable section, last season brought the opening and staffing of a new office in Miami. This facility is covering and issuing market reports on sub-tropicals, cut flowers, the Miami Wholesale Terminal and Dade County fruit and vegetable unloads. A new office was also opened in North Palm Beach from which the majority of "wet" and "dry" vegetable reports, watermelons, Pompano State Farmers Market platform prices and the Florida honey market are issued. This consolidated facility is also being used as a training office for new federal-state reporters since it is now the largest winter shipping point reporting station in the country. Also, for the first time this season, the state is providing some new supportive market data for the citrus industry from the market news office in Orlando, accompanying expanded information for the fast developing foliage industry in Florida. Changes in the fruit and vegetable section have resulted in increased efficiencies and expanded services but not without growing pains. Overall costs were reduced but staff responsibilities are at maximum, severely limiting flexibilities.

The poultry and egg section successfully assumed the daily handling of movement data, adjusted mailing costs by use of third class mail and was in the process of changing state-wide reporting of prices when personnel cuts severely limited even routine activities. Service continues at reduced levels until staffing replacements are possible.

The livestock section contended with staffing turn-over problems while responding to greater demands to assist the livestock industry which was in the grips of a severe economic depression. Staff worked in close support of a successful "baby beef" promotion while continuing to cover auction markets and work with youth shows and sales. Federal grade revisions during the year further complicated market coverage and additional efforts were made to inform the industry of the effects of the grade changes. By year's end, recommendations were formulated on consolidating the Livestock Market News reporting office and locating the headquarters in central Florida. If approved, recommended changes will permit better utilization of field personnel, increased market coverage and expanded informational services to industry.

The *Market Bulletin* initiated and completed the first circularization of its mail list since 1964. The effects of the purge were significant, reducing the mail list from over 102,000 to under 57,000. However, by the end of the fiscal year the number of subscribers had risen by 7,000. A tremendous amount of hard work was required to complete the circularization which would not have been successfully accomplished without the help and support of department print shop personnel and many division volunteers. Following the completion of the mail list purge, staff began proposed revisions on the publications mast head, listing regulations and improved production methods. With future adoption of many of the proposed standards we believe the

Market Bulletin can improve information and services to all Florida agriculture.

#### Florida Crop and Livestock Reporting Service

The goals set forth in the 1975-76 annual plan of work for the Florida Crop and Livestock Reporting Service were generally achieved during the past year. In most instances, efforts to improve accuracy and gain greater efficiency in the day-to-day work were successful.

**Administration** — The joint administration of the Florida Department of Agriculture and the U.S. Department of Agriculture statistical programs provides both efficient and economic operation of projects. New state and federal legislation continued to prompt increased emphasis on assessing procedures for maintaining security of highly sensitive statistical data. Requests for information were answered promptly. During the year, a suggestion submitted by our fiscal assistant resulted in a modification of the department timesheet for part-time and OPS employees to accommodate needs of the Fair Labor Standards Act.

**Livestock Market Information** — The monthly publication, "Florida Livestock Roundup", was continued with a strong demand for the variety of marketing information contained in this release. Considerable effort is devoted to evaluation of items for possible inclusion in this publication. The Florida Cattlemen's Association endorses the publication by reproducing and mailing the "Roundup" to its entire membership. By agreement with the association, some mailing costs are defrayed with funds from the livestock market information project. Initial industry contacts were made to further review content for the "Roundup".

The annual publication "Florida Livestock Statistics, Livestock Summary" was continued as a compilation of all major livestock data available to reflect the position and trend of Florida's livestock industry with other states and the U.S.

**Turfgrass Survey** — This survey, first funded by the legislature in 1974, was completed in early 1975 with the publication of a 21 page comprehensive report. The report covered turf production and maintenance in all segments of the turf industry. Based on survey results, for the year ending June 30, 1974, expenditures for maintenance and establishment of new turf amounted to \$523 million. Total replacement cost of turf and irrigation equipment was valued at \$758 million. There were over 911,000 acres of turf maintained in the state and 44,150 acres were used for commercial sod production. Estimated value of sod at the production site was \$21.2 million. In addition to the respondents who cooperated on the survey, more than 30 individuals, private or governmental units assisted in developing survey lists, designing questionnaires or participating in other phases of the project. The report was well received by the industry. It provides for the first time, a valuable reference base for planning and decision making.

**Citrus - Tree Census** — The photography for the 1976 biennial citrus tree census was accomplished by March. Photo interpretation was made as photos were delivered and field checking followed shortly thereafter with completion by July 15. A preliminary report of survey results was released in August, 1976 with a detailed summary to follow in late 1976.

**Citrus Crop Forecast** — The 1975-76 citrus crop was forecast with acceptable accuracy. All varieties were very close to the first forecast, except Valencia oranges which were under-forecast by about 10 percent. Early and midseason oranges were forecast at 98 million boxes with 98.8 million boxes being harvested. The grapefruit crop was forecast at 50 million boxes with 49 million being harvested. Specialty crops harvested were practically the same as forecasted.

**Citrus - Pounds Solids** — The 1975-76 FCOJ forecast converted to total gallons was almost as forecasted in October. However, the boxes of fruit were slightly more than projected with the yield per box being slightly less than projected.

**Citrus - Special Maturity Program** — A special survey which tested maturity of grapefruit on a biweekly interval was

performed and results reported to the industry at the request of the Florida Citrus Commission's Grapefruit Improvement Committee. The research project on oranges, to relate weight to volume was continued.

**Citrus - Prices Received** — Citrus prices were collected and published on a monthly basis during the 1975-76 season. At the end of harvest, a weighted season average price was published based on utilization data. Data was collected and utilized to revise the 1974-75 monthly and season average prices to include fruit marketed cooperatively and in participation plans.

**Citrus Summary** — In cooperation with the Market News Service, the "Citrus Summary" and "Marketing Florida Citrus" was again published. These provided major statistical series under one cover for mailing to a single unduplicated mailing list.

#### Bureau of License and Bond

During this fiscal year there were 2911 licenses issued to bonded dealers in agricultural products. The revenue from license fees paid in support of the licenses amounted to \$55,290.00.

For the fiscal year, licensed dealers posted with this office surety bonds totaling \$16,818,812.00. The average amount of bond supporting a bonded dealer's license for the year was \$7,438.66. The decrease in average bond amounts resulted from a larger number of small bonds furnished by nursery dealers.

We issued 23 licenses under the Livestock Prompt Collection Law this year which brought in revenue in the amount of \$2,300.00. This law was amended to provide that the date of sale to producers and farmers shall be the date of delivery of livestock. The livestock markets were furnished copies of the amended law with a letter from Commissioner Conner, expressing the full intention of the department to effect a thorough enforcement of this law's requirements.

During the year our four field employees made 1107 contacts with dealers in agricultural products who were unlicensed for the purpose of investigating and determining whether or not these unlicensed dealers were operating in any manner where compliance with the license and bond statute would be required. Additionally, there were 3,573 contracts made in an effort to develop information as to the status of dealers transacting business in the state involving the various commodities covered under the license and bond statute. Finally, there were 1,967 personal contacts made in an effort to obtain license fees, applications for licenses, and surety bonds involving those dealers known to be transacting business under the authority of this statute.

Field personnel made 479 contacts involving the investigation of claims during the fiscal year. As of July 1, 1975, we had 35 claims pending with a total monetary value of \$100,537.00. During the fiscal year we received 119 additional claims involving monies totaling \$497,524.60 and, finally, had pending as open files as of July 1, 1976, 33 claims totaling \$359,338.95. During the fiscal year the surety companies involved paid claims totaling \$80,696.04. At the same time, subsequent to administrative action, bonded dealers paid claims without recourse to their bonds in a total amount of \$89,676.75. In addition to the above, unlicensed and unbonded dealers settled claims totaling \$2,652.20. In summary, through our license and bond activities, there were \$173,024.99 recovered either from dealers or their sureties for the benefit of the Florida producers.

The last session of the legislature amended the license and bond law so as to exempt dealers who operate strictly at the retail level and who purchased less than \$1,000.00 worth of agricultural products from Florida producers, their agents, or representatives during the peak month of such purchases within the calendar year.





## DIVISION OF PLANT INDUSTRY

*Halwin L. Jones was employed in 1949 as an inspector with the State Plant Board, which was to become the division of plant industry in 1961 under government reorganization. He was assistant plant commissioner and assistant director from 1951 until November, 1964, when he became director. Mr. Jones was born March 7, 1924 in Crescent City, Fla., and was graduated from the University of Florida in 1949 with a bachelor's degree in agriculture and in 1952 with a master's degree in agriculture.*

The Division of Plant Industry is the plant pest regulatory agency of Florida. Its mission is to protect Florida's agricultural and horticultural industries through detection and control or eradication of plant pests which could pose serious economic threats.

Major activities include nursery inspection and certification, non-nursery certification, and other special certification programs and regulatory duties.

Field personnel are the mainstay of an organization such as the Division of Plant Industry, which has enjoyed a worldwide reputation in plant pest regulatory work. The reputation is due primarily to the conscientious efforts of its personnel — plant specialists, plant pest technicians, and apiary inspectors — who are located throughout the state. Administrative, scientific, and technical personnel housed in Gainesville, Winter Haven, and Miami lend vital support to field personnel.

### Bureau of Plant Inspection

The Florida nursery industry experienced its largest single growth increase and recorded its greatest amount of nurseries under inspection in the history of the Division of Plant Industry during the past year.

At the end of the 1975-76 fiscal year, 7,107 active nurseries were registered and under inspection, an increase of 1,196 nurseries over the 5,911 reported at the end of the 1974-75 fiscal year. Nursery stock dealers, agencies which buy and sell plants but do not propagate them, totaled 5,160, compared to 4,536 at the end of the 1974-75 year, an increase of 625 new stock dealers.

The division's Bureau of Plant Inspection maintained a 2.43 nursery inspection average in spite of the necessary interruptions imposed on inspection personnel whose assistance was required temporarily on the citrus blackfly emergency eradication program during the winter and spring months. Stock dealer establishments received an average of 1.31 inspections during the year.

The nursery acreage reported at the end of the year was 16,779, an increase of 3,480 acres over the last year. Of the total acreage, 869 acres were in citrus. The increase is due primarily to new large plots of native bromeliads and palms, registered as nurseries.

There were 86 site-approved commercial citrus nurseries and 42 own-use citrus nurseries reported this year for a total of 128 citrus nurseries with trees eligible for commercial grove use. Citrus nursery acreage in the state now totals 928.70 acres and 576,570 commercial citrus nursery plants.

### Bureau of Pest Eradication and Control

A major shift of efforts occurred within this bureau's activities this year primarily as a result of a new foreign pest. With the discovery of citrus blackfly in Broward County in February 1976,

the other bureau programs began operating temporarily with skeleton crews as personnel were sent to South Florida to combat this new serious menace. Heavy infestations of citrus blackfly have been known to reduce citrus production up to 80 percent of normal yields.

By the end of June 1976, over 125 state and federal workers were assigned to the blackfly program. Some persons were employed under the Broward County Comprehensive Employment Training Act (CETA), a program supported by federal funds which made possible the employment of a great many more persons to work on the division's program. The approval of a \$2,002,035 budget by the state legislature in June 1976 helped launch the official eradication program for the citrus blackfly in July. The U.S. Department of Agriculture is contributing an additional \$2,000,000 to the state-federal cooperative eradication effort.

At the end of June, the regulated area covered 250 square miles including northeast Broward County and the Boca Raton area of Palm Beach County. A total of 291 nurseries were under inspection in the regulated area at that time, and no infestations of the blackfly had been found in nurseries in Dade or Palm Beach counties.

The regulated area at the end of June included an estimated 2,300 acres of commercial citrus groves. A total of 54,515 boxes of fruit representing 111 truckloads was fumigated and certified.

The Division of Plant Industry's spreading decline program has undergone a few changes in the past year. This year brought to a close a long period during which the state and federal governments participated in the cost of the burrowing nematode control program. The state will continue in the control program but the entire expense will be paid by the grower. Growers began assuming part of the cost of the program in 1966 at the request of the state. As the percentage of the cost to the grower was increased each year, few persons dropped out of the program. This is indicated by a net increase of 52,601 linear feet of chemical buffer being maintained since 1972.

### Bureau of Citrus Budwood Registration

The Bureau of Citrus Budwood Registration continues to provide virus-free, reliable sources of budwood to the citrus industry. Budwood is available to all Florida residents in small quantities at no charge. Amounts in large quantities for commercial use are sold at the prevailing market price.

Exocortis is still the most important virus being tested in the indexing program. As the losses due to young tree decline continue to mount, the industry depends more on rootstocks that are intolerant of exocortis virus; for instance, Carrizo citrange was used as the rootstock for nearly half of the total registered nursery trees produced in the last two years.

A new propagation technique that permits the elimination of viruses from infected plants was introduced during the past year.



Training in the use of 'shoot-tip grafting' was obtained by bureau personnel with the purpose of establishing virus-free propagations from a wide selection of citrus varieties infected with viruses that have prohibited their use on many rootstocks. Results from this work should prove of great benefit to the industry in years ahead.

The last details of relocating the Budwood Foundation Grove have been completed. The grove planting now consists of 382 citrus budlines occupying approximately 58 acres and representing all major varieties of citrus produced in Florida.

In the spring of 1975, the Division of Plant Industry postponed its release of certified Star Ruby material when it was discovered that nearly 60,000 illegal Star Ruby trees were already in the state. The postponement was a precautionary measure to ensure that the illegal scions and the legal propagations did not become mixed. However, a meeting of the citrus budwood registration introduction and advisory committee will be held in January 1977, for the purpose of offering a recommendation to Commissioner Conner as to whether or not the illegal material should be released to nurserymen and growers.

#### Methods Development Bureau

Gerald G. Norman, who had been coordinator of this bureau since its inception, retired during the past year and Ralph E. Brown was appointed to fill the position. In addition to previous duties associated with the Methods Development Bureau, the responsibility for the direction of the Division's Imported Fire Ant Program, security at the Doyle Conner Building, and fumigation activities have been retained by Brown and transferred to this bureau.

The Methods Development Bureau, which is responsible for exploring and researching new programs and techniques which serve as aids or tools in the field of plant protection, also supervised the construction of a \$58,000 quarantine greenhouse in Gainesville, which was dedicated in February 1976.

The quarantine facility will permit the safe introduction of new varieties of plants into the state, especially citrus, which could be of considerable benefit to Florida agriculture.

The imported fire ant has moved into previously uninfested areas, and infestations are now known to exist in every county except Monroe and Dixie.

The ground treatment program was continued in coastal counties, with a total of 5,158.5 acres being treated in 11 counties, compared to 12,186 acres in nine counties the previous fiscal year. Nineteen counties were treated under the division's former aerial treatment program, which encompassed 104,824 acres. A total of 209,942 acres was treated during the 1974-75 fiscal year.

The Environmental Protection Agency held hearings at intervals during the year on a label for Mirex, but as yet no settlement has been made. The Allied Chemical Corporation ceased production of Mirex and sold its plant and rights to production of this product to the State of Mississippi.

#### Bureau of Apiary Inspection

The beekeeping industry has proved to be a vital segment of Florida agriculture through the years. Florida continues to be ranked among the top three states in the nation in value of honey produced. The state's honeybee population, estimated at 300,000 colonies, produced 30 million pounds of honey last year at a wholesale value of about \$12 million.

Apiary inspectors of the Division of Plant Industry examine honeybee colonies throughout the state regularly for signs of disease, especially American foulbrood, which is considered to be the most difficult of all honeybee diseases to control. However, due to inspectors constant vigilance, Florida's disease rate is only .6 percent, one of the lowest rates in the nation.

During the 1975-76 fiscal year, 212,945 honeybee colonies were inspected in 4,750 apiaries; 1,271 colonies of American foulbrood

were found and destroyed in 302 apiaries.

Apiary reports indicate 96,551 colonies were inspected and certified for movement to 27 states. Personnel of the Bureau of Apiary Inspection examined and certified 16,635 colonies for queen and package bee producers.

#### Bureau of Entomology

The Bureau of Entomology conducts investigations of entomological problems which might have economic significance or taxonomic importance. The bureau also provides a very important arthropod identification service which is available to nursery owners and growers, as well as private citizens and division plant specialists who inspect nurseries for plant pests.

A total of 113,545 specimens were identified from 8,426 samples received during the fiscal year. The number of specimens added to the Florida State Collection of Arthropods (FSCA) was approximately 63,936 pinned and labeled specimens, 6,889 slide mounts, 32,133 vials, and 3,931 papered or envelope specimens, for a total of over 106,889 processed specimens. The entire collection at the Division of Plant Industry museum serves as a ready reference for the routine daily arthropod identification service provided by taxonomic entomologists employed by the division, as well as research associates of the FSCA.

#### Bureau of Plant Pathology

With a reduction in the number of pesticides that are available to agriculture, growers are having to turn to alternate methods for controlling plant pests. Biological control, disease resistance, pest management, and improved cultural practices are some of the more important areas being pursued. This bureau has significantly stepped up investigations to determine the cause and control of plant pests and diseases which present a threat to Florida agriculture.

The milkweed vine, *Morrenia odorata*, infests approximately 300,000 acres of citrus in Florida and is difficult and expensive to control. Investigations with a pathotype of *Phytophthora citrophthora*, which is a biological control agent for this vine, have been expanded. The addition of a new staff member, with expertise in microbiology, has enabled our staff to pursue in-depth studies of the stability of this biocontrol agent. Host range studies are in progress on 65 important Florida crops concerning their susceptibility to *P. citrophthora*. Field control tests using different reproductive forms of this fungus have continued to show good results.

An investigation to determine the cause of heavy seedling loss due to root damage in fumigated and nonfumigated soils in some citrus nurseries was initiated. In another investigation, observations and studies continue on the cause and control of young tree decline in citrus, particularly as to the effect of different sources of nitrogen and to the presence of *Fusarium*.

A milam clone of citrus from California, which is reported to have resistance to *Phytophthora*, is being indexed for viruses in the division's new quarantine greenhouse in Gainesville. Studies are also under way to determine the relationship of a virus found in illegally imported Star Ruby grapefruit to necrotic ring spot virus, which has been reported from Texas. These studies are being done cooperatively with the USDA Citrus Experiment Station in Orlando, Texas scientists, and the Division of Plant Industry.

#### Bureau of Nematology

Service to Florida's nurserymen, growers and homeowners is the area of continued emphasis by the Bureau of Nematology. The identification of plant parasitic nematodes recovered from soil and root samples and identification of plants are priority activities within the bureau. A total of 19,249 samples were received for nematode identification during this past fiscal year,

an all-time high for the Bureau of Nematology. This number is 20% more than the previous record in the 1974-75 fiscal year.

Other activities of staff personnel included 60 field visits to nurserymen and growers to assist in solving production problems involving nematodes.

A nematode survey for detection of soybean cyst nematodes and other plant parasitic nematodes associated with general field crops is continuing in northwest Florida.

A closer evaluation of nematodes associated with plants imported into Florida from abroad was also initiated during the year.



# DIVISION OF STANDARDS

*Sydney D. Andrews was born in Tallahassee on July 23, 1915. He attended Florida State University and Biarritz University in France. During World War II he served in Europe with the U.S. Corps of Engineers. In 1933 he joined the department as a laboratory assistant, was later promoted to assistant oil analyst, and then to chief of the petroleum inspection section. In 1963 he was made assistant director of the division and then director in 1968. He is a past chairman of the National Conference on Weights and Measures and is currently chairman of the committee on petroleum and lubricants for the American Society for Testing and Materials.*



The Division of Standards is charged with the responsibility of administering Florida's gasoline inspection, brake fluid and weights and measures laws. Its work, carried out through a coordinated program of field and laboratory testing, is oriented to protecting both consumer and seller alike.

This is especially true of the work done by the Bureau of Weights and Measures, whose accurate calibration of weighing and measuring devices throughout the state assures a fair transaction to both the buyer and the businessman.

In the Bureau of Petroleum Inspection, testing of petroleum products and brake fluid from both a quality and quantity standpoint safeguards all parties and points out to the industry careless or unscrupulous operators.

The division headquarters and main laboratory are located in a modern testing facility in Tallahassee. In the field, the division has a highly trained inspection force conducting a variety of tests on weighing and measuring devices and drawing fuel samples for quality analysis in the laboratory. Specialized field equipment such as mobile laboratories and large scale test units equipped with up to 24,000 pounds of test weights add to the completeness of the program.

A branch laboratory having the latest in fuel testing and weights and measures calibrating equipment is located at Port Everglades, serving the needs of consumers in South Florida.

## Bureau of Petroleum Inspection

More than 4.4 billion gallons of gasoline and kerosene were sold in Florida in 1975-76. During the year, 77,000 samples of these products as well as diesel fuels, burner oils, lubricating oils and brake fluids were drawn from retail and wholesale outlets by bureau inspectors for laboratory analysis. Better than 57 million gallons of gasoline, kerosene and diesel fuel were found below the state standards of quality and removed from sale at Florida terminals and service stations.

Petroleum inspectors make periodic tests on gasoline pumps, petroleum meters, vehicle tanks and liquefied petroleum gas meters at both wholesale and retail outlets. During 1975-76, 178,000 inspections were made on retail fuel pumps.

Approximately 6,100 wholesale measures and meters were tested. Those found inaccurate or incorrect were either condemned for use or placed under correction order.

Laws and regulations governing petroleum measures and fuel quality are under constant review to be certain Florida's consumers and industry receive protection under current and uniform standards. In recent years, diesel and burner fuel specifications were adopted after pilot studies showed that 27% of these products were substandard. A study of antifreeze indicated a need for legislation to regulate the quality of this product after division surveys produced evidence that some antifreezes being sold were harmful to the cooling system and others did not contain sufficient ingredients to properly safeguard against freezing and engine overheating.

## Bureau of Weights and Measures

Laboratories of the Bureau of Weights and Measures house the primary state standards of length, mass and volume that are directly traceable to the National Bureau of Standards in Washington. From the laboratory, state weights and measures inspectors and other regulatory personnel receive calibrated standards and equipment to test all weighing and measuring devices used in Florida commerce.

During 1975-76, more than 100,000 inspections, tests and calibrations were performed by the bureau in the laboratory and field. Weights and measures found measuring inaccurately or incorrectly were removed from use.

During the fiscal year, bureau inspectors tested packages of non-food commodities valued at close to \$1 million. Items found to be short measure are stop-sold until correct and adequate information is given on each label.

The moisture content of grain is of vital importance to buyer and seller, because grain is sold by weight. Moisture in grain affects weight at the time of sale and special measuring devices are used commercially to establish moisture corrections. In 1976 the weights and measures laboratory started a program to calibrate and certify moisture meters used by farmers and buyers. Still in the investigative stages, the laboratory is testing samples of grain, principally corn, for moisture, then making comparisons on standardized meters. When the study is complete, bureau personnel hope to test commercial moisture meters for accuracy as a service to users of these devices.

Recognizing the importance of owner and user appreciation for weighing and measuring devices, the bureau encourages and sponsors self-maintenance programs. The laboratory certifies weights and other measurement standards for authorized scale mechanics and industry. It cooperates with county and municipal governments in developing programs at the local level, giving weights and measures the broadest possible coverage.

In 1975 the Metric Conversion Act was signed into law by the President, ending America's isolation in a metric world. The legislation calls for voluntary conversion to the metric system and establishes a metric conversion board to enable smooth and timely transition.

Florida's Bureau of Weights and Measures, equipped with metric measurement standards and expertise in metrics will be capable of assuring fair and accurate measure in the new system as the United States goes metric.